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VOL. III. MARCH, 1904. NO. 12.

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DYSMENORRHŒA AND ALLIED MANIFESTATIONS:
Ella B Everitt, M. D.; - - - - 369

SOME OBSERVATIONS ON SURGERY OF THE EAR;
Don M. Campbell, M. D.: - - - - 375

A FLAP FROM THE FASCIA LATA IN THE OPERATION FOR THE RADICAL CURE OF INGUINAL HERNIA:
Hal C. Wyman, M. D.: - - - - 379

MASTOID OPERATION vs. WILDE'S INCISION IN A CHILD NOT QUITE EIGHT MONTHS OLD:
Emil Amberg, M. D. - - - 380

EDITORIAL: - - - - - 381

EDITORIAL NOTES; - - - - - 383

NEW INSTRUMENTS AND DEVICES; - - 387

PROGRESS OF MEDICAL SCIENCE; - - 390

BOOK REVIEWS; - - - - 396

ANNUAL INDEX: - - - - 399

ADVERTISING INDEX; - - - - XII

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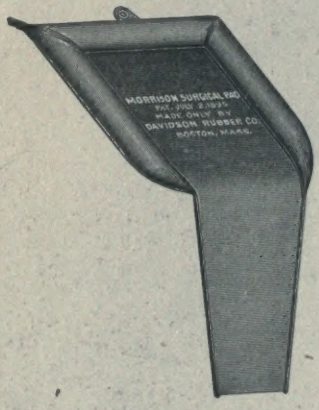

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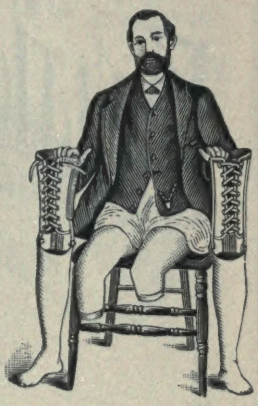

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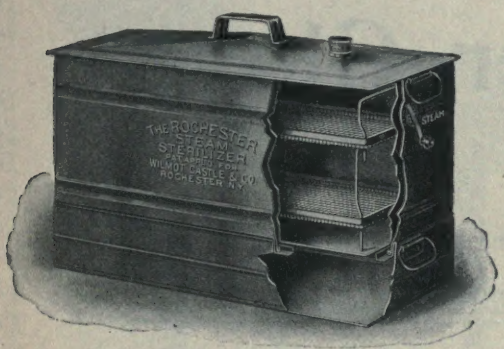

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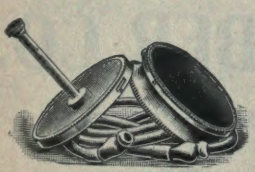

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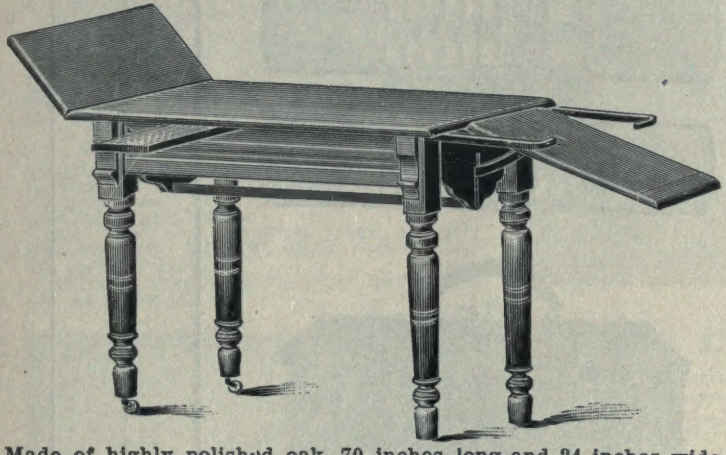

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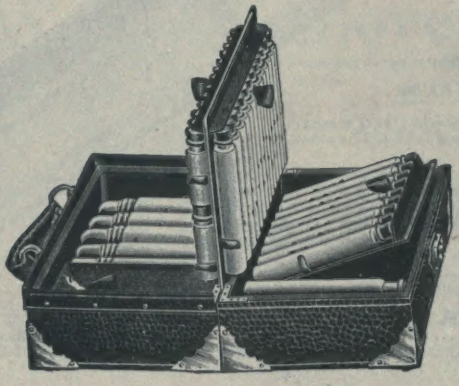

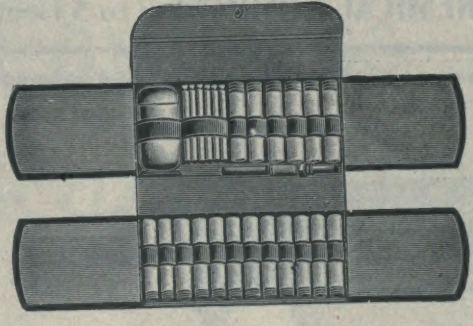

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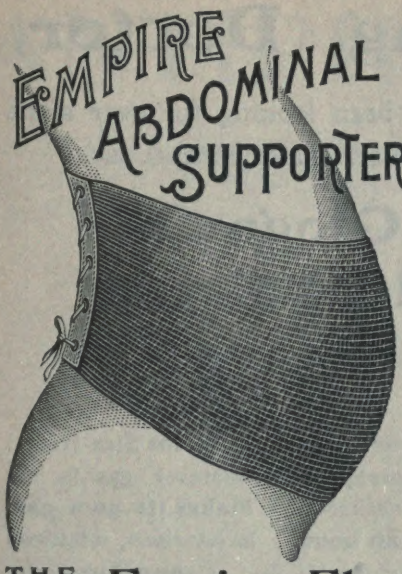

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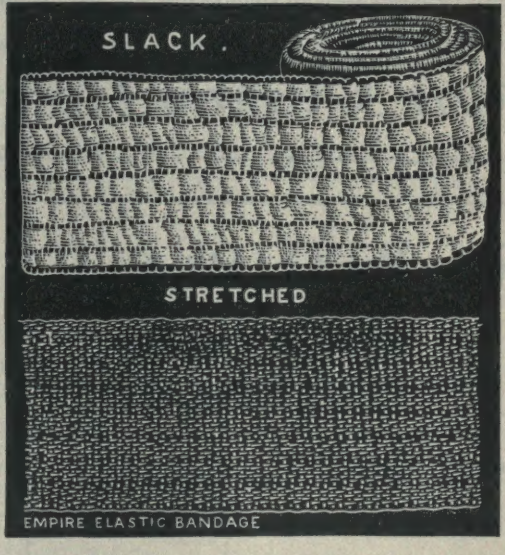

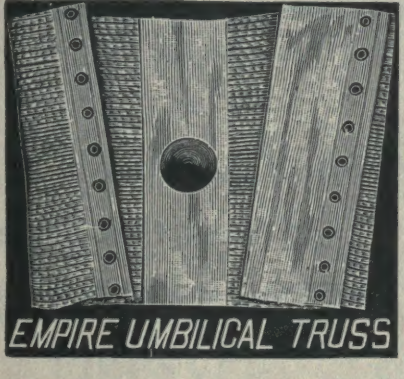

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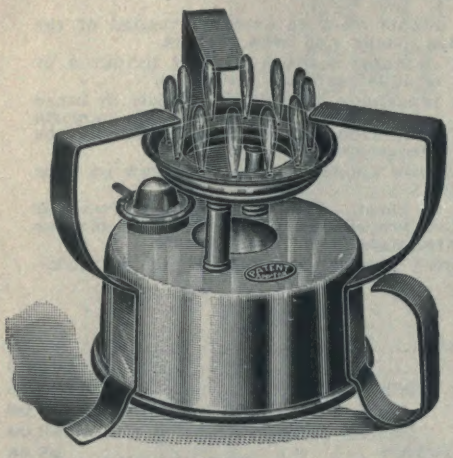

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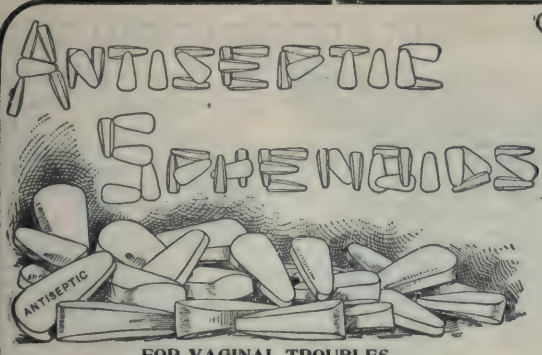

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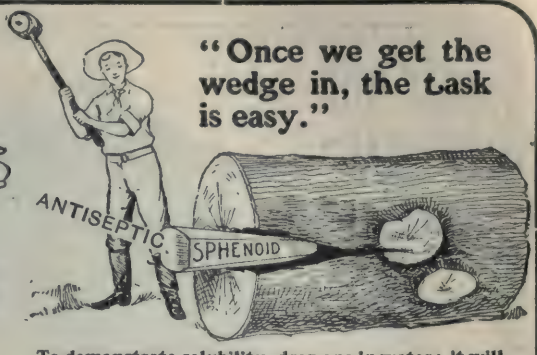

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INDEX TO ADVERTISERS.

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Allison, W. D. Co.....XXIV
Ambulatory Pneumatic Splint Mfg. Co..XVIII
Antikamnia Chemical Co.....XVII
Baker, J. R. & Sons Co.....XXIII
Bausch & Lomb.....XI
Becton, Dickinson & Co.....XXV
Biogen Co., The.....XXVI
Bovinine Co.....Inside Front Cover
Castle, Wilmot & Co.....III
Chesterman & Streeter.....XXIII
Chicago Electro Appliance Co.....XII
Chloride of Silver Dry Cell Bat'ry Co XVIII
Columbus Aseptic Furniture Co.....XX
Charles N. Crittenton Co.....XVI
Daily Med. Journal.....XII
Davidson Rubber Co.....II
Denver Chemical Mfg. Co.....IX
Empire Mfg. Co.....VII
Faultless Rubber Co.....IV
Fellows, Mr.....XXXII
Fries Bros.....XXXI
Gebauer Chemical Co.....V
Glogau Co., The.....VIII
Goodrich, The B. F. Co.....XVIII
Grosvenor, The J. M. Co.....XXIX
Hartz, The J. F. Co.....XVII, XXIII, XXIX
Hastings & McIntosh Truss Co.....XVIII
Howard Electric Novelty Co.....XXII
Hussey, E. J. & Co.....XI
Iron Mountain Route.....XXIV
Journal Mich. State Med. Society.....XVI
Kny-Scheerer Co.....XXI
Kress & Owen.....I
Lambert Pharmacal Co.....Back Cover
Liquid-Air Oxygen.....XVI
Marks, A. A.....III
McCoy, Howe Co.....XI
Merrell, Wm. S., Chemical Co.....XIX
N. Y. C. & H. R. R. R.....XVIII
N. Y. School of Physical Therapeutics..XXII
Ohio Truss Co.....XXII
Olds Motor Works.....XIII
Edward Pennock.....XI
Pilling, Geo. P. & Son.....III
Polk, R. L. & Co.....XXXI
Practice for Sale.....XXIV
Scheidel, W. & Co.....XIV
Smith, M. H. & Co.....X
Stearns, Frederick & Co.....XVII
Tagliabue, Charles J.....XXIX
Truax, Greene & Co.....VIII
Upjohn Co.....XV
Van Houten & Ten Broeck Co.....XXVIII
Young, F. E. & Co.....XVIII
Victor Electric Co.....XXVII
Western Leather Mfg. Co.....VI
Woman's Hosp'l of the State of Mo..XXXII

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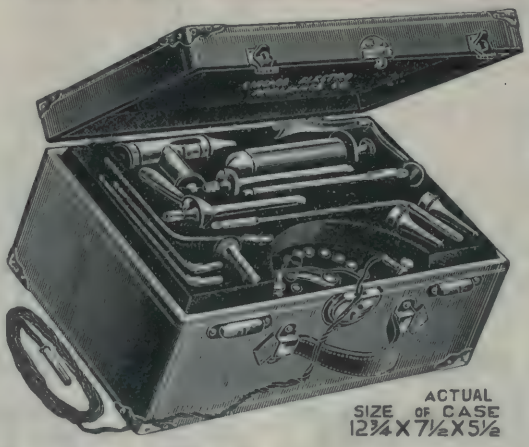

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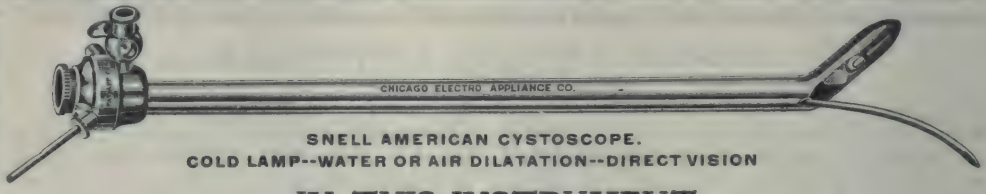

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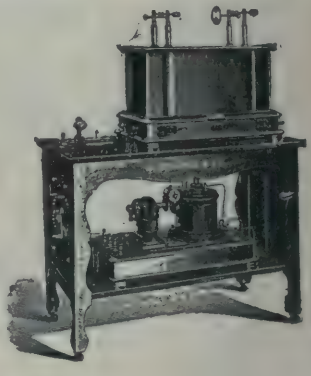

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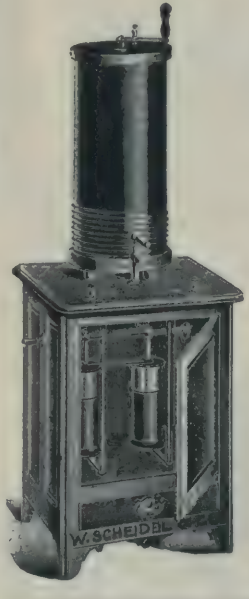

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THE DETROIT MEDICAL JOURNAL.

VOL. III. MARCH, 1904. No. 12.

DYSMENORRHOEA AND ALLIED MANIFESTATIONS.*

By ELLA B. EVERITT, M. D.,
Professor of Gynaecology, Woman's Medical College of Pennsylvania, Philadelphia.

In my choice of a theme for presentation this evening, I have been influenced not only by the suggestions of your esteemed chairman, but also by my estimate of the importance of the subject to general practitioner and specialist alike. It is probable that physicians are consulted more frequently for dysmenorrhœa than for any other one gynæcologic disturbance. In view of this fact and the consequent abundant opportunities for the study of this affection clinically, our lack of exact and definite knowledge concerning it is remarkable. Unfortunately, I cannot hope to add much to what is already known; but believing that it is distinctly helpful to set down in order from time to time, such conclusions as we may have drawn, I venture to present a brief resumé from the point of view of professional experience, starting where the physician commonly begins in the consideration of the case, namely with dysmenorrhœa as a symptom.

We are all well aware of the tendency on the part of many practitioners to regard as trivial a degree of menstrual suffering which, if associated with the performance of such other physiologic functions as digestion or elimination, would receive assiduous attention. In order that we may not be accused of going to the other extreme, and exaggerating the importance of insignificant sensations, it may be well to state what may be legitimately included in the term *menstrual molimina*.

It is the exceptional woman who is not conscious of some variation in bodily states immediately preceding or during the menstrual period. This may be limited to an exacerbation of her normal energy, an impulsion and ability to do a greater amount of work than usual, before the appearance of the flow. Or quite the opposite may be noted, and disinclination and lassitude may take the place of increased nervous unrest and activity. Vasomotor disturbance may be shown by greater susceptibility to cold, some superficial capillary contraction, or by the sudden flushing of capillary dilation, and a sense of heat throughout the body, the whole resembling the heat flash of the menopause, but in much milder form and without the associated dyspnœa. In women who are not without sexual feeling, there is commonly an increase in the excitability before, during or immediately after the period.

Passing beyond these general sensations, there may be local discomfort, as a sense of weight or fulness in the pelvis, or an almost indefinable sense of pelvic tension which might be regarded as a menstrual aura in some instances.

*Read by invitation before the section on Obstetrics and Gynaecology of the Wayne County Medical Society, December 21, 1903.
Detroit, Mich., March 15, 1904.

Soreness and swelling of the breasts increasing throughout the week preceding the flow, are invariable forerunners in some patients. Diarrhœa is a frequent accompaniment of the first day. Even a slight aching in the pelvic, sacral and lower abdominal regions, and aching fulness in the external genitalia should not be regarded as abnormal. But from this point onward, we pass to the realm of the pathologic, and reach distinct dysmenorrhœa, varying from simple cramps to agonizing suffering.

Classification:

Nothing is more important in our consideration of this really complex subject than a practical classification of the forms of dysmenorrhœa based on its etiology. A generally accepted and rational one is as follows, the order being that of relative frequency:

1. *Neuralgic.* Under this head are included those cases unassociated with demonstrable structural abnormality in the pelvic organs, or with local disease. This form presupposes an underlying condition of lowered nervous vitality, which may be chronic or temporary. It is the common manifestation of the neurotic temperament; or, of nervous exhaustion, the result of overwork or excessive mental strain, in patients usually strong nervously. It may be due also to such constitutional conditions as anæmia, chlorosis, gout, rheumatism, malaria, or syphilis, wherein the blood is so altered as to profoundly affect the nutrition of the nervous system. It has been objected that "for pelvic pain at the menstrual time, bred by starving or irritated nerves in some remote part of the nervous system, the term dysmenorrhœa is inappropriate, for it does not appear that the pain is due to menstruation:"* and the word menorrhalgia has been suggested (by Massey) as a substitute. It seems probable, however, that by the menstrual functioning there is just enough additional strain on the already weakened nerve tone to cause a local, pelvic expression, hence we may regard menstruation as bearing at least a partial causal relation to the pain in the neuralgic form and we may retain the term as convenient and readily understood.

II. *Congestive.* When the pelvic organs are affected by inflammatory disease or are the seat of tumors favoring abnormal vascularity of the parts, the physiologic congestion of the menstrual period augments the pain of the inter-menstrual period, hence the term congestive dysmenorrhœa. This is the co-called inflammatory form of some authors.

III. *Obstructive.* By this is meant those cases due to mechanical interference with the escape of fluid from the uterine cavity: the obstruction itself being due to stenosis of the cervical canal from sharp flexions, inflammatory adhesions, congenitally small orifice or the presence of polypi. Some authorities tend to include under this class those cases in which from defective development or abnormal histologic conditions in the uterine wall, the blood breaks through *into the cavity* with difficulty. While it is important in dealing with cases of dysmenorrhœa to remember this possible etiology, this is not the usual understanding of the subdivision.

Whether or not retention of the menstrual fluid within the cavity is really caused by flexions, has been a much discussed question. By some observers, it is claimed that even in flexed uteri, the orifices are open during the flow, and that they do not interfere with the discharge. By others, it is stated that in cases of flexion an abnormally sensitive condition of the mucous membrane exists at the internal os, which when the menstrual blood makes pressure upon it, is responsible for the pain. It is not within the scope of this paper to argue this point. Suffice it

*Reed: Textbook of Gynaecology.

to say that while many patients with marked flexions menstruate painlessly, as a rule there is, with this condition, a resulting endometritis to which the pain at the menstrual period may be directly attributed, and the curing of which relieves the dysmenorrhœa even through the flexion is only partially corrected, or subsequently returns.

IV. *Ovarian.* Ovarian dysmenorrhœa is merely an exaggeration of the inter-menstrual pain by the congestion of the physiologic period, in patients suffering from ovarian disease.

V. *Membranous.* The normal intermenstrual growth of the uterine mucous membrane is a "preparation for a possible future embryo; the tissue of the decidua menstrualis is the forerunner of the decidua graviditatis; if an ovum wherever it is discharged, be fertilized, it attaches itself to the thickened uterine wall, the tissues become the decidua graviditatis, pregnancy follows, and the decidua is not discharged until the time of parturition. If, however, fertilization does not take place, there is no attachment, the tissues degenerate and become the decidua menstrualis,"* to be discharged insensibly with the next flow. But if as the result of chronic endometritis, the membrane in its formation shows marked hypertrophy and excess of fibrous tissue, instead of disintegrating, it maintains its membranous character and is exfoliated in sections or as a complete cast of the entire uterine cavity. The pain is due to the expulsive effort of the uterus as it endeavors to separate and cast off the membrane.

DIAGNOSIS OF VARIOUS FORMS:

The characteristics of the pain in the different forms of dysmenorrhoea are sufficiently distinct and pronounced as to *suggest,* if not definitely indicate, the casual factors. A careful study of the pain with relation to its location, time of onset, duration, character, severity and recurrence, will amply repay the physician in every case.

In the neuralgic form, we note all grades of severity from slight cramp to violent nerve explosions. The location is commonly uterine (hypogastric) but may be ovarian. Its onset is usually simultaneous with the appearance of the flow, increasing in severity from one to several hours, and subsiding gradually after a free discharge has been established, or ceasing suddenly after an attack of vomiting or faintness has produced general relaxation. The pain is undulatory, or a series of pains, resembling those of uterine contractions in labor. Each pain gradually shades on to a maximum intensity, remains a few seconds at this point, then shades off to partial or entire freedom from discomfort. After a short interval, another pain of the same character but more severe, follows, until the height of the nerve storm is reached, when it subsides in one of the two ways above indicated. The association of neuralgic pains in other parts of the body, the absence of pelvic lesions, and the fact that the function is painlessly performed when the subject is under no nervous or physical strain, confirm the diagnosis. Teachers and students who suffer from this form, not infrequently menstruate in perfectly normal manner during vacations.

The pain in the congestive type is more or less constant. It is especially noteworthy that it is *acquired,* after some years of painless menstruation. The location is usually median, low in the abdomen, or in the back over the sacrum, although in tubo-ovarian disease it may be inguinal, spreading throughout the pelvis and down the thighs. It is more apt to be a dull or severe *aching* than acute pain, and is relieved as a rule after

*American Textbook of Physiology.

the flow has lessened the congestion.

In the obstructive and membranous varieties, pain is intermittent and spasmodic, and may precede the flow several hours. It is usually hypogastric and may be very severe. In the membranous form, it is often of the character of a partus miniaturus, leaving the patient prostrated after the expulsion of the membrane. If the latter is shed in sections, there may be a series of pains, each series culminating when the fragment has passed the cervical canal. The expulsion of clots often marks the cessation of pain in the mechanical type. In all these four forms, the recti muscles are involuntarily held more or less rigid while the patient is suffering.

Ovarian dysmenorrhœa is an *acute* pain, in the ovarian region: or *an aching* in the uterus together with the ovarian pain. Gastric reflexes are common. The pathologic condition of uterine appendages will serve to distinguish it from the neuralgic form.

INTERMENSTRUAL PAIN: In addition to these regular forms of menstrual suffering, two other manifestations are especially important, viz.: menstrual headache, and what is erroneously called "intermenstrual dysmenorrhœa," better, the "mittelschmerz" of the Germans. By the latter is meant an attack of pain usually inguinal, occuring with greater or less regularity, about midway between the menstrual epochs, sometimes a little earlier or a little later. This phenomenon is almost invariably seen in neurasthenic subjects, and develops in the later menstrual life. The pain may come on, on two or three successive days —a cramping paroxysm lasting one or two hours, and then subsiding: or it may continue longer, with no recurrence. It may alternate, returning only every other month, or it may have the same periodicity as the flow itself. When located in the right side, it is not infrequently mistaken for appendicitis, or appendiceal colic, and the appendix is removed. It is needless to say that the pain is unaffected by this surgical procedure. I have under my care at present a patient who has been suffering in this way, for seven years, during which time she has had the operations of curettage, appendectomy and even the removal of hemorrhoids, all undertaken to relieve the intermenstrual pain which she still has. The affection is especially obstinate, resisting almost all manner of treatment. Two theories as to the cause have been advanced: 1st: that the pain is due to the tension of ripening follicles, a theory which is hardly tenable, as follicles are ripening constantly throughout the entire interval between periods. 2nd: The second theory, that at the middle of the intermenstrual period the recession of blood pressure in the pelvis reaches its ebb, offers a more probable explanation. (This is quite independent of the rise in general blood pressure, as shown by the so-called "Stevenson's wave.")

It will be remembered that the menstrual cycle as given by Leopold shows:

Tumefaction of the mucosa	5 days
Menstrual flow	4 days
Regeneration of mucosa	7 days
Resting of mucosa	12 days
	28 days

From my own observations of patients having mittelschmerz, I should be inclined to believe in a nervous recession corresponding to the vascular one, and to consider this pain a nerve cry similar in character to some neuralgic dysmenorrhœas.

MENSTRUAL HEADACHE: The headache related to the menstrual period is one of the most persistent and trying forms of this malady. The head pain is sometimes prodromal, coming on one, two or even three days before the flow appears, and

gradually subsiding a few hours after it is established. Again, it may accompany or follow the flow, but in the same individual, it usually recurs at a similar time with each period. The headache may be vertical, frontal, or less frequently occipital. Sometimes it is a distinct hemicrania, often of a neuralgic character. Occasionally, neuralgic headache will alternate with menstrual cramps of neuralgic origin, one or the other being the accompaniment of each period, but both not occurring in the same month. The attack may begin as a dull, confused sensation throughout the head, gradually centering as pain on one or the other side. Or, it may be distinctly neuralgic from the first, affecting the superficial nerves on one entire side of the head. In some instances, throbbing of the vessels indicates the congestive character, while in others the vascular tension is decidedly low. Disinclination for food, or nausea and vomiting may be present.

The etiology of these headaches is probably different in different forms. The neuralgic type seems closely related to mittelschmerz, in that it appears to be the result of lowered nervous tone. Whether or not there is a nervous center presiding over the function of menstruation, the nervous system is unquestionably profoundly affected by the menstrual period. In some cases this depression is manifested in the abdominal plexuses; in others, in superficial nerves in remote parts of the body: in others, in the central system.

THE HYGIENE OF THE MENSTRUAL PERIOD:

Before even mentioning the treatment of these various conditions, the question of the hygiene of the menstrual period may be pertinently introduced. Two objects are to be attained in the management of a menstruating patient: One, the maintenance of the best possible general health, and the other, the equalization of the circulation throughout the body. While the calling of too much attention to the pelvic organs and their activity is unwise and undesirable, a certain thoughtfulness for hygienic conditions should be encouraged in all cases. Avoidance of extra nervous or mental strain is important, and to this end, the school surroundings of young girls should be looked into. The analyses of thousands of cases of dysmenorrhœa in school girls shows an increase in pain with the pursuit of studies and usually there is at least a lurking conclusion that the mental effort is responsible. In reality, well regulated mental and physical work is beneficial: to the *lack of adequate physical care and training* during school life, the results in ill health should be attributed. It is essential, however, that physiologic periods should be regarded, hence the desirability of separate schools for young girls, and such an elastic educational system as will call for no unusual mental effort during the period. The interruption of ordinary routine is seldom necessary or advisable. Exercise in moderation and in the open air during the period promotes painless menstruation. Under conditions of average health, there need be no interruption of the usual bathing habits. It must be remembered, however, that where there is an *acquired* habit of abstaining from the bath during the period, this practice cannot suddenly be broken up, but the daily bath must be gradually resumed. Warm, light clothing, with ample protection to the ankles, is essential to an equable distribution of blood in the body, and the prevention of pelvic congestions. The vaginal douche after the flow is unnecessary for personal cleanliness, and, especially in unmarried women, should be discountenanced.

TREATMENT OF DYSMENORRHOEA.

In regard to treatment, it is not my

purpose to enter into a detailed recital of what may be done to cure dysmenorrhœa. The means for the relief of the paroxysm are well known. Certain definite indications, based on the casual factors, must be met, and the methods of doing this are more or less uniform throughout this country. Systemic states must be appropriately combated; flexions and misplacements must be corrected, cervical stenoses overcome; curable inflammatory diseases systematically treated, and hopelessly diseased appendages removed. But *the method of approach*, the manner of investigating the case, calls for more than a passing word. We are all well aware of the too frequent haphazard treatment of these patients; with no examination and little questioning, an antispasmodic or anodyne (well if it is not an opiate or alcohol in some form) is prescribed, and the patient is given the general direction, to "take douches." No definite instructions are given as to how or when this should be done, or how the necessary apparatus should be cared for, and there is no clear idea on the part of the doctor as to what is to be accomplished within the pelvis by this procedure. I do not know how to condemn sufficiently strongly this kind of practice, and while I would not be understood as advocating the indiscriminate examining of women, married or single, it is either a false regard for the feelings of the patient, or gross negligence which allows treatment so utterly at random. Systematic local treatment aseptically practiced *when indicated* undoubtedly has great value. But unless administered intelligently with a clear idea of existing pelvic conditions, and of the diseased states amenable to such treatment, it is worse than useless, is bound to bring the method into disrepute, and is often responsible for grave infective lesions calling for subsequent sacrificial surgery.

The importance of attaching a correct valuation to the pelvic lesion discovered by examination, cannot be too strongly emphasized. We dare not jump at conclusions. That an anteflexion exists, is not final proof that it is the cause of dysmenorrhœa. This may be due to a prolapsed ovary quite overlooked, or to an exhausted nervous system calling for rest, and *not* for any local medication or tinkering. On the other hand, a markedly anæmic condition does not preclude the existence of serious pelvic deformities calling for surgical interference before normal functioning can be performed. Let me therefore close with the strongest possible plea for the study of each patient as an individual, and not merely as a case of stenosis, or of tumor or of endometritis. Only by such conscientious and painstaking investigation can we discharge our duty to our patients and our profession.

1807 Spruce Street.

The Chicago Inter-Ocean rises to remark with gravity that owing to the business acumen of a Wisconsin physician and some English capitalists, the price of radium will be reduced from $5,000,000 to $2,500,000 a pound. This is indeed cheering news.

The discoverer of a new medical clay in Colorado says that he expects to live to be 300 years old. In proof of his contention, he claims that he can drink four gallons of water without discomfort. It is possible that he is endeavoring to make himself fire-proof.

Indianapolis is planning repairs to the City Hospital which, it is estimated, will cost between $25,000 and $30,000.

SOME OBSERVATIONS ON THE SURGERY OF THE EAR.*

By DON M. CAMPBELL, M. D., L. R. C. S., (Edin.)
Detroit, Mich.

Mr. President and Gentlemen of the Lambton County Medical Association:—

There is a feeling in the minds of the laity which is perhaps shared in part at least by a respectable percentage of the general medical profession, that diseases of the ear are more or less unamenable to treatment and this is particularly true when the form of aural disease under discussion happens to be a chronic one.

At first blush it would appear to the unbiased observer strange that the treatment of diseases of this organ should have fallen so completely under the ban of public denunciation and yet a close observation of the facts of the case will easily give a very lucid reason for the apparent failure of the medical profession to bring relief to this class of sufferers.

In the first place it is an incontrovertible fact that something like 75 per cent. of the power or acuity of hearing may be gradually lost before the sufferer becomes cognizant of the fact by a limitation of his power of hearing as employed in the ordinary walks of life and in social intercourse.

In consequence of this fact, many aural affections do not come to the consulting-room until long after the chances of good recovery have passed by reason of the disease already having become chronic, whereas, if the patient had early become cognizant of his infirmity he might, and probably would, have sought earlier relief and consequently received much more benefit at the hands of his medical adviser.

Then again, many of the ear affections are a remote result of a disease in some other organ occurring early in life and the connection between the original disease and the remote result in the ear is not usually traceable as a clinical entity.

Furthermore, the connection between aural diseases and general systemic affections such as Syphilis, Rheumatism, Uric Acid Diathesis, Auto-intoxication and Auto-infection, is not well and broadly recognized in the general medical mind.

So, altogether, there are a good many reasons why the treatment of aural affections should have fallen somewhat into disrepute in the public and the general professional mind.

Can the statement that aural surgery is capable of so helping these cases as to bring a brighter outlook to the whole field of aural diseases be successfully substantiated? I think it can.

There are four principal situations in which surgery plays a very important rôle in the prevention and cure of diseases of the ear; they are in (1) Chronic catarrhal otitis media; (2) Acute suppurative otitis media; (3) Acute and chronic septic infiltration in the mastoid process; (4) Chronic suppurative otitis media.

Let us look for a moment at each one of these affections.

Chronic Catarrhal Otitis Media.

There is in this country a vast army of men and women who are more or less miserable and who make those with whom they come in contact more or less miserable also by reason of an inability to hear well.

Not only does their condition produce unhappiness, but they are seriously handicapped in the race of life and do not make as good citizens as they would could they hear well.

Why are there so many deaf people in adult life who are unable to find relief

*Read before the Lambton County Medical Association.

from their infirmity at the hands of their medical advisers?

The answer has to be sought in the early life-history of these sufferers, in which will be found the cause of their later debility.

The large majority of these people have been affected in early childhood, with various catarrhal affections of the upper air tract which have invaded the eustachian tube and the middle ear and have been manifested in later life by chronic catarrhal otitis media.

Quite a large percentage of these difficulties, in fact almost all of them, are essentially made up of, or at least complicated by, naso-pharyngeal adenoids which latter are the pathological conditions existing in early life producing, later on, chronic catarrhal otitis media.

Now, if this be true, certainly surgical measures, if applied early enough, will relieve a large number of these cases.

The only difficulty is to persuade the people and the profession of the connection and of the absolute necessity of early surgical intervention in order to remove the primary cause of deafness from this condition.

Let the profession remove more adenoids and hypertrophied tonsils in early life and there will be less chronic catarrhal otitis media deafness in adult years.

This is also true of the hypertrophic intra-nasal diseases, such as hypertrophic rhinitis and posterior hypertrophy of the inferior turbinated body.

A case in illustration of this surgical truth is the following:

Master A., aged 7, consulted me in 1897 for recurring attacks of deafness and earache which had been going on for a year. Examination showed a considerable depreciation in the hearing and some nasal catarrh with hypertrophy of the inferior turbinated body. There were a few small naso-pharyngeal adenoids.

The tympanic membrane was moderately indrawn, and the seat of considerable venous congestion. The child was placed under treatment for his catarrhal affection, together with inflation of the middle ear. In two or three weeks he had failed to improve materially, and it was deemed wise to subject him to thorough surgical removal of the adenoids and galvano-cauterization of the inferior turbinated hypertrophy.

When this was done, the improvement in hearing was complete, prompt and permanent.

In the writer's opinion, this child would, in later life, have become a victim of chronic catarrhal otitis media with permanent depreciation of the power of hearing.

Acute Suppurative Otitis Media.

There is a certain percentage of cases of acute suppurative otitis media which does not go on to resolution after perforation of the tympanic membrane. Some pass on to the stage of chronic suppurative otitis media with all that this means to depreciated hearing and endangered life. Some, on the other hand, pass on to mastoiditis, with its dangers to the intracranial contents.

Clinically, this peculiar thing has been noted, viz:—The earlier a tympanic abscess opens, the more quickly it will heal and the fewer cases of non-resolution and mastoiditis are found.

Does this fact, together with the other well known clinical observation that a clean incised cut will heal better than a jagged tear with loss of substance, teach any lesson?

Why, yes; that surgery at this point properly and judicially applied, will put the tympanic cavity and membrane in the best possible position to quickly heal, with restoration of function and prevention of complications.

If therefore, a clean-cut incision be made through the tympanic membrane in

the early stage of the collection of pus in the tympanic cavity, the chance of a quick and complete recovery will be greatly enhanced, and another laurel added to aural surgery.

There are, too, quite a goodly number of cases of acute tympanic suppuration which have gone on to perforation in which drainage is insufficient, and in those cases a free incision of the tympanic membrane will bring about good drainage and an early cessation of the suppuration.

In illustration of this statement many cases could of course be cited; one however will suffice:

Miss L., aged 6, a subject of inherited syphilis; had been for several years a mouth-breather from adenoid hypertrophy in the pharyngeal vault. In March last, she contracted influenza, which was accompanied by an acute suppurative otitis media, with spontaneous perforation of the tympanic membrane. The perforation proved to be too small, drainage was poor and the suppurative process failed to pass on to resolution. After six weeks of struggle the prejudice of the parents against surgical intervention was overcome and under anæsthesia the child was subjected to the adenoid operation, together with a free incision through the tympanic membrane, carried well up into the posterior-superior canal wall.

The recovery was prompt and complete in about two weeks, resulting in complete cicatrization of the drum, cessation of all discharge, good hearing and improved respiration.

This is an illustration of the kind of a case that would ultimately have become one of chronic suppurative otitis media with necrosis ,with all that implies.

Acute or Chronic Septic Infiltration of the Mastoid Process.

What appendicitis is to abdominal surgery, mastoiditis is to intra-cranial surgery.

Whenever the mastoid cells are infiltrated with pus there is an ever present source of septic infection of the intra-cranial contents and its removal by surgical procedure is an ever present and pressing necessity, whether the process be chronic or acute.

There is, perhaps, no place in surgery in which so much good has been done and so many lives saved, as in the modern understanding and management of septic diseases of this region. Not only while the infection is confined to the cells is it accessible to the knife of the surgeon, but even after it has invaded the sacred precincts of the intra-cranial cavity it is still in many cases amenable to successful surgical management.

Brain abscess may be evacuated, subdural abscess reached and drained, septic thrombosis of the lateral sinus may be dealt with surgically and brought to a successful termination. Even septic meningitis has in a few cases been brought to a happy issue after surgical drainage has been established.

The lesson to be learned here is that the only safe treatment for septic mastoiditis is an early opening of the mastoid cells and the establishment of free drainage in order to prevent the extension of the septic infection to the intra-cranial cavity.

In this situation as in all others an ounce of prevention is worth several pounds of cure. The cases in illustration of this phase of the subject are so numerous as to be unnecessary to detail.

Chronic Suppurative Otitis Media.

This is an affection which is the result of insufficient surgical drainage during an acute suppurative otitis media, and many cases could have been prevented by early surgical intervention. The affection is a source, not only of very decided deterioration in the function of hearing, but also one of continual danger to the life of the sufferer, in many cases, being a matter of great discomfort from

the presence of a foul-smelling discharge. In a very high percentage of cases this is a trouble which is not amenable to treatment by means of syringing, cleansing and various forms of antiseptic drops and powders; however, some few cases in which the suppuration comes entirely from the tympanic cavity and is not accompanied by necrosis in the walls or ossicle of the middle ear, will recover under this form of treatment.

All cases which do not respond promptly to these milder means of treatment, say in two or three months, should be subjected to the radical operation for chronic suppurative otitis media, which means the removal of all necrotic tissue in the mastoid and middle ear and throwing these two cavities into one which finally becomes epidermized and all danger from suppuration is then at an end.

In illustrations of this phase of the subject, I will briefly refer to the case of Miss W., who had been for ten years a sufferer from a chronic suppurative otitis media, following scarlet fewer.

There was a foul discharge and attacks of pain from retained discharge were experienced at frequent intervals. She carried a temperature of ½ to 1 degree continuously, was nervous and irritable. Ordinary means of treatment failed to bring relief, and in October, 1900, she was subjected to the radical operation for suppurative otitis media. The mastoid was opened and freed from all necrotic tissue, the posterior canal wall was removed, the tympanic cavity thoroughly curetted and the large cavity thus formed was allowed to heal by granulation. The recovery was complete in two months. and since then there has been no suppuration from this ear; the patient has no fever, has gained in weight and is happy.

It would seem to the writer that the following conclusions can be safely formulated:

(1) A very large number of cases of catarrhal deafness in the adult could with certainty have been prevented by early surgical treatment of the nasal and naso-pharyngeal cavities in the child.

This is particularily true of all children in whom the adenoid condition can be diagnosed.

Every case of adenoid hypertrophy should be thoroughly treated.

(2) In acute suppurative otitis media, a much larger percentage of complete cures, with the restoration of good hearing and the prevention of the dangers, debilities, and inconveniences of chronic suppurative otitis media, could be secured by employing surgical intervention to establish thorough surgical drainage.

(3) In acute and chronic septic mastoiditis, many lives would be saved by early surgical intervention.

(4) In chronic suppurative otitis media much suffering would be prevented and many lives saved by surgical intervention after ordinary means had failed to cure the case.

In conclusion, Mr. Chairman, it would seem to the writer, that there are great opportunities for doing good in this field of aural surgery, that the field is not well cultivated and that the people need a little education, first as to the inconvenience and dangers of aural diseases, and second as to the possibility of cure or relief from their ravages.

Who shall do the educating? And are we ourselves alive to the necessities of these cases?

57 West Fort street.

The report of the State Board of Medical Registration of Indiana for 1903, shows that there are now between 6,500 and 7,000 physicians in the state, of whom about 600 are in Marion county. Nearly 250 new physicians registered in the state last year.

A FLAP FROM THE FASCIA LATA IN THE OPERATION FOR THE RADICAL CURE OF INGUINAL HERNIA.

By HAL C. WYMAN, M. SC., M. M., Prof. of Surgery in the Michigan College of Medicine and Surgery.

In many cases of inguinal hernia there is not enough aponeurotic tissue above the ligament of Poupart to enable the surgeon to make a union of the abnormal hernia opening, and radically cure his patient. After opening the groin with a bistoury and exploring the incompetent abdominal rings, about the first thing noticed by the surgeon's finger is that it may be impossible to so divide the oblique muscles that a part can be sutured to a new place on Poupart's ligament, nearer the pubis, and thus strengthen the defective abdominal walls so that hernia cannot occur.

To meet this condition, I have made a flap from the fascia lata, and after turning it upward have sutured it to the aponeurosis of the abdominal muscles forming the superior border of the abdominal border of the abdominal rings; and have thus been enabled to close the opening completely, without undue tension upon the stitches.

It is probable that most of our relapses after operation for the radical cure of hernia are due to the fact that the remedy we commonly apply by the Bassini and other well-known methods really leaves the intra-abdominal space somewhat smaller than it was before the hernai occurred. We should, on the contrary, try to create more space for the intestines, even if we have to remove much of the omentum or any portion of the intestines which is attached to the hernial sac or abdominal rings.

This may in some instances make necessary a resection of a part of the intestine and an end-to-end approximation with sutures, a proceeding more dangerous than the making of a flap from the fascia lata which can be turned up under the abdominal muscles and there sutured so that the weak places in the abdominal wall are effectually closed.

I make the flap as follows:

The first incision over the hernia openings is made from the anterior spinous process of the ileum to a point within about ¾ of an inch from the spine of the pubis. This cut is directly over Poupart's ligament. Above it are the inguinal hernias, below it are the fascia lata and its falciform process. Now, with strong retractors, the divided skin and superficial fascia and adipose layer are readily separated so that one can easily with knife or scissors cut downward ¾ of an inch from the inferior border of Poupart's ligament about one-third of its length from the anterior iliac spine; then the scissors should be turned at right angles to this cut and the fascia further divided in a direction parallel with the ligament to the external border of the falciform opening. With caution to avoid wounding either the saphenous or the femoral vein, the falciform process of the fascia lata can be cut through to the inferior border of Poupart's ligament. A parallellogram-shaped flap is now free on three borders, and can be turned upward; and by means of loop sutures it can be dragged under the aponeurosis forming the upper border of the hernial opening and it will effectually plug the defective space. I have not found it necessary to close the opening in the fascia lata made by the reflection of this flap, except in so far as that result is accomplished by bringing the external wound together by interrupted sutures.

I am not aware that it weakens the important ligament of Poupart, or that it increases the liability to femoral hernia.

46 Adams avenue west.

MASTOID OPERATION VS. WILDE'S INCISION ON A CHILD NOT QUITE EIGHT MONTHS OLD.*

By EMIL AMBERG, M. D.
Detroit, Mich.

A case which came under the author's care last July seems worthy of being recorded from the fact that the patient was scarcely eight months old, being born November 30, 1902, and also for the reason that the common belief that a Wilde's incision is sufficient in infants seems not altogether well founded. Jerome K. was brought to me on the 14th of July, 1903. I was told that he had had pneumonia when about three of four months old. In the four weeks preceding the visit swelling behind the left auricle had appeared several times.

On July 7 the mother noticed that the left auricle was standing forward. I incised and abscess behind the auricle, releasing a large quantity of pus. This incision was of temporary benefit only. On July 23 I performed a mastoid operation, under chloroform narcosis at Harper Hospital, finding an astonishingly great destruction of the bone. I curetted the bone thoroughly, especially the walls of the sinus leading into the epitympanic cavity. The wound behind the auricle healed satisfactorily. Since about the beginning of February, the ear seems to be dry.

The curetting for adenoid vegetations a short while ago was probably of beneficial influence also on the middle-ear suppuration.

This case shows:

1. That a middle-ear suppuration is not always "outgrown," as is sometimes suggested to parents.

2. That Wilde's incision is not sufficient in all cases.

3. That only the infantile condition of the mastoid portion saved the child from a more serious outcome.

4. That an extensive destruction of the bone may take place also in early life.

5. That the removal of the diseased portion is the only proper surgical procedure.

6. That in persistent middle-ear suppuration, attention must be paid to adenoid vegetations.

270 Woodward avenue.

*Read before the Wayne County Medical Society, Feb. 25, 1904.

The city administration of the city of Waterloo, Ia., have recently put into effect a novel and efficacious test of the sewer system. A quantity of oil of peppermint was placed in a number of localities, and residents of the city were requested to report at once any trace of peppermint odor. The experiment is said to have been thoroughly successful.

Philadelphia's new medico-chirurgical hospital was formally dedicated on February 23 last. Ex-Mayor Warwick made the presentation address and Mayor Weaver and other city officials were present. Much credit is due the legislature of the state of Pennsylvania, which appropriated the sum of $200,000, enabling the work of reconstruction and remodeling to be done with expedition. The entire building has been made wholly modern.

DETROIT MEDICAL JOURNAL

A MONTHLY EPITOME OF
PRACTICE AND THERAPEUTICS

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SUBSCRIPTION PRICE, $1.00 PER YEAR.
SINGLE COPIES, 15 CENTS.

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The management cannot undertake to return rejected manuscript unless full postage for the purpose is submitted with the contribution.

Address all communications to 103 and 105 Miami Avenue, Detroit, Michigan, U. S. A.

Vol. 3. DETROIT, MICHIGAN, MARCH, 1904. No. 12.

Etiology of Pelvic Disease.

In the earlier days of man's habitation of this round world of ours, he wanted but little here below and was satisfied with less. His implements were few and chiefly of a warlike nature; his wives as many as he could fight for, his children legion. In these primitive days the human race lived close to Nature's heart, with woman the physical equal of man in all respects. In fact woman usually did the work, man the fighting. The physiological and natural functions of mating and child-bearing fell to the lot of every woman, labor was of trivial moment and a barren woman a rarity. Observations among savage tribes and primitive nations today show the same general conditions as regards freedom from accouchement difficulty and pelvic disease.

What, on the other hand, do we find among the so-called civilized nations the world over? Almost universal celibacy for 10 or more years after puberty, with chastity an ethical principle and a social necessity for woman alone, who, even after the opportunity offers is so often unable or unwilling to perform the physiological functions of her sex. The strongest instinct of the human race and of all animal life today and always, is the sexual, to the end that reproduction of species may be permanent up to the limit of the world's resources of support. With the advance of civilization has developed the moral code which frowns upon the animal instinct of indiscrimnate mating, and monogamous marriage is the result. The stability of the social fabric thus founded, abundantly justifies the wisdom of ages and yet both the prostitutes, male and female, and the divorce court testify against the universal applicability of moral codes when opposing natural instincts. In all mammalian life, the female is almost irresistibly impelled to mate and reproduce her kind. If this be true, even in a measure, of woman, then the restrictions of modern society, the enforced life-long celibacy of many, the late marriage of others and the interference with Nature's functions after marriage must certainly have some bearing, etiologically, upon the development of pelvic disease (if we may accept the contrast between savage and civilized woman as proof). Histologically, the testicle and ovary are not dissimilar. Each secretes a substance of value to the organism and ripens reproductive cells. Yet degenerative changes in the male genitalia, unless due to tuberculosis or traumatism, are rare, while tissue changes in the ovary and uterus are frightfully common. Is a developmental error the sole or prime etiological factor, or can we blame the modern interference with physiological functions to which the female is almost alone subjected or subjects herself?

Eliminating the traumatisms of labor, the infections from gonorrhœa or sepsis, the imperfect development of ligaments or uterus and the prenatal embryonic cells, there still remain many pathological conditions in the female pelvis for which

we can give no logical reason. Why the cirrhotic or cystic ovary, the myomatous uterus, the broad ligament tumor?

There is little doubt that the common methods of preventing or interrupting conception in almost universal use, interfere with Nature's laws and that "race suicide" leads in many cases to a slow maternal suicide as well; and doubtless the departure from the normal life of the sexes to which civilized woman has accustomed herself is a factor in the local congestion which precedes inflammatory tissue change.

There is opportunity for further thought and study along these lines by broad-minded physicians who have the best interests of the human race at heart.

Should investigation show that the foregoing hypotheses are well founded, then woman as a class has no place in the business world. She should marry young, keep the home and rear her children, while the man fights the world as in the olden days. All artificial social and financial restrictions upon early marriage should be, so far as possible, removed and a more deliberate choice of a life-mate fostered by making divorce more difficult.

Woman should be taught at puberty the true meaning of the sexual functions by a mother who understands them herself and should look forward to a happy life with her self-chosen mate, taking her added blessings when the stork comes around, with cheerful and thankful heart. The boy needs the same education along the same lines to the end that early marriage may replace the "errors of youth," until the race reverts to the type of our forebears, to whose sturdy independence, freedom from the caste distinctions of finance and social preferment, early marriages, large families and natural, healthy lives most of us owe not only our very existence but our best characteristics as well.

Surgical Treatment of Typhoid Perforation.

The recent monograph of Drs. R. H. Harte and A. P. Cooper Ashhurst, of Philadelphia, upon this subject reviews the literature since the first operation by Von Mikulicz, in 1884, and gives the more recent results and operative technique.

Etiologically, perforation occurs most frequently in young men, usually in the second or third week of the disease. Nearly 9,000 cases are reported, giving an average frequency of about 2½ per cent. Pathologically it has been shown by Mallory that the accident occurs as a result of the formation of so-called "typhoid cells," consisting of endothelial cells gorged with leucocytes, and subsequent necrosis of the infiltrated tissues. Unquestionably, many perforations occur which are unrecognized because the peritoneum takes care of the added infection and the small opening becomes quickly closed by fibrinous exudate or adhesive inflammation to an adjacent coil of gut or the omentum. The common diagnostic points are localized pain and tenderness, dulness and œdema of the abdominal wall, with temperature and pulse variations indicative of peritoneal irritation. These symptoms are at best vague and indefinite and careful observation is necessary to justify the added danger of laparotomy, which according to Harte and Ashhurst is the only treatment in typhoid perforation.

But little anæsthetic is required in the patient's debilitated condition, and the operation should be performed with all possible rapidity. Incision is preferable on the right side over the cecum, the perforation, which is usually single, closed by a purse-string suture and the toilette quickly made. Analysis of 362 cases operated shows a mortality of 74 per cent., the mortality depending somewhat upon the size of the perforation and the

promptness of operation. It is estimated that 16,000 people die annually in the United States of typhoid intestinal perforation, 25 per cent. of whom, according to this analysis of 362 cases, might be saved by operative measures; whence the authors conclude with much justice that "To trust to medical treatment is nothing short of folly."

The great difficulty to be surmounted by the general practitioner in whose hands typhoid cases are, is that of diagnosis of perforation; and until clinicians can give us a few definite principles on which to base more than the suspicion of a provisional diagnosis, both physician and surgeon will hesitate to hazard the chances of a very sick patient by the added shock of laparotomy. Thus is explained the comparatively small number of cases operated in proportion to the undoubted frequency of perforation. Should the practice of opening the abdomen for suspected perforation become general, we fear the diagnostic errors might increase rather than lessen the general typhoid mortality.

About Ourselves.

With this issue of the Detroit Medical Journal, we complete the third year of publication; and we think we are justified in feeling that we can lay the completed volume before our readers without misgivings. We have steadily lived up to the policy which was first laid down,—that of giving the practitioner a clean, practical medical journal once a month.

The present volume contains forty-one original articles, each one of them of value to the thinking man; a number of them have been accompanied by illustrations that have enhanced their practical value to the physician, notably the articles of Ramon Guiteras, George W. Crile, J. B. Kennedy, B. R. Schenck and Joseph C. Bloodgood. The range of subjects handled has been a large one, and we feel that for the most part, at least, they have been well treated. The editorial columns have been published with a view to supporting the rights of the profession in the numerous departments of activity in which the practitioner of today finds himself; the department of current news, we believe, has served its purpose of keeping our readers informed of current topics of special interest; a large number of new instruments and devices have been brought to the attention of the profession through the department devoted to that work; the progress of medical science has been handled on a broad-guage and practical scale; and the attention of the Journal's readers has been brought to a large number of useful books.

We have been gratified by the prompt support we have received from all sides; and we bespeak the continuance of these desirable conditions. If your subscription expires with this issue, as many do, let us have your renewal; it will mean an ever better Journal.

EDITORIAL NOTES.

In *The Journal of Cutaneous Diseases* for February, 1904, Dr. A. E. Carrier, of Detroit, reported a case of mycosis fungoides which was treated with apparently complete success by the use of the X-ray. The patient, a man of 75, had suffered from the disease for a period of twelve years, during most of which time the distressing condition had slowly increased in severity. Marked pruritus was present and about 3,000 tumors were noted, varying in size from that of a pin-head to that of a small orange. Relief from the almost unbearable itching was sought by the patient, and Dr. Carrier made use of the X-rays to secure this, but without expectation that the treatment would cause the disappearance of the tumors

themselves. A six-inch tube of moderately low vacuum was used, and the exposures were limited to five minutes at a distance of five inches. In a little over two weeks the itching was entirely relieved and inside of three months the only trace of the disease was the presence of pigment in the sites of the larger tumors. There was no medicinal treatment in connection with the exposures to the rays, and Dr. Carrier gives all the credit to the tube. The advanced age of the patient and the length of time during which the disease had persisted make the happy result the more remarkable.

Examinations for U. S. Marine Hospital.

A board of officers will be convened to meet at the Bureau of Public Health and Marine Hospital Service, 3 B Street, S. E., Washington, D. C., Monday, April 4, 1904, at 10 o'clock a. m., for the purpose of examining candidates for admission to the grade of assistant surgeon in the Public Health and Marine Hospital Service.

Candidates must be between twenty-two and thirty years of age, graduates of a reputable medical college, and must furnish testimonials from responsible persons as to their professional and moral character.

The following is the usual order of the examinations: 1, Physical. 2, Oral. 3, Written. 4, Clinical.

In addition to the physical examination, candidates are required to certify that they believe themselves free from any ailment which would disqualify them for service in any climate.

The examinations are chiefly in writing, and begin with a short autobiography of the candidate. The remainder of the written exercise consists in examination on the various branches of medicine, surgery, and hygiene.

The oral examination includes subjects of preliminary education, history, literature, and natural sciences.

The clinical examination is conducted at a hospital, and when practicable, candidates are required to perform surgical operations on a cadaver.

Successful candidates will be numbered according to their attainments on examination, and will be commissioned in the same order as vacancies occur.

Upon appointment the young officers are, as a rule, first assigned to duty at one of the large marine hospitals, as at Boston, New York, New Orleans, Chicago, or San Francisco.

After five years' service, assistant surgeons are entitled to examination for promotion to the grade of passed assistant surgeon.

Promotion to the grade of surgeon is made according to seniority, and after due examination as vacancies occur in that grade.

Assistant surgeons receive sixteen hundred dollars; passed assistant surgeons, two thousand dollars; and surgeons, twenty-five hundred dollars a year. When quarters are not provided, commutation at the rate of thirty, forty, and fifty dollars a month, according to grade, is allowed.

All grades above that of assistant surgeon receive longevity pay, ten per centum in addition to the regular salary for every five years' service up to forty per centum after twenty years' service.

The tenure of office is permanent. Officers traveling under orders are allowed actual expenses.

For further information, or for invitation to appear, before the board of examiners, address

Surgeon-General,
Public Health and Marine
Hospital Service,
Washington, D. C.

From the report of the Massachusetts State Board of Health the *Journal of the American Medical Association* estimates

the cost of antitoxin at 28 cents per 1,000 units and concludes therefrom that the commercial manufacture of antitoxin is unduly profitable. This editorial estimate fails to note that 40 per cent. of the product of the private producer is returned unused; that each package has a syringe which costs about 25 cents, with the resultant net profits averaging bareiy 10 per cent.; and that the whole process of private manufacture is carried on under a most rigid inspection by the Marine Hospital Service, which requires many additional safeguards from which municipal and state laboratories are exempt.

The "*Chicago Clinic*" vouches for the following:

"A Chicago newspaper man was asked to speak at a recent banquet over which Dr. John B. Murphy presided as a toast-master. "It was suggested to me," he said, "that it might be a delicate compliment to the toast-master for me to wear a Murphy button on this occasion. I went up and down State street to all the department stores searching for one. I found college buttons, fraternal buttons, G. A. R. buttons, but no Murphy buttons. Meeting a physician, I asked him what a Murphy button might be. He told me that the Murphy button was worn in the abdomen—on the inside. Then he rattled off a lot of stuff that was Greek to me. I caught the idea, however, and I have worn one in honor of the toast-master. I take it that the Murphy button is the refined name for what we used to call the 'belly-button.'"

An announcement from Bordeaux states that the committee of the seventh international congress of otology, which will hold its session in Bordeaux August 1 to 4 next, has arranged for an exhibition of macroscopic and microscopic specimens, drawings and photographs, etc., touching the normal and the pathological anatomy of the ear and the nasal fossa. The quarters of the faculty of medicine of Bordeaux have been put at the disposal of the congress while it is in session, and ample room for the most extensive exhibitions is assured. Drs. Guemont and Lafite-Dupont will have charge of the arrangements. Specialists and others are invited to advise D. E. J. Moure, Bordeaux, France, if they intend to send anything of the kind mentioned for exhibition at the Congress. Specimens must be in the hands of the commission in Bordeaux by the first of July next.

On February 22 last "Founders' Day" was observed by the medical department of the University of Michigan at Ann Arbor. The special feature of this year's celebration was a tribute to the late Prof. George E. Frothingham, whose work in his lifetime had so important an influence in rasing the standard of work for the department in which he was interested. Drs. George and William Frothingham, Prof. Frothingham's sons, were present at the exercises, which were held in Sarah Caswell Angell hall, and which were attended by members of the University's medical faculty, in cap and gown. Dr. Flemming Carrow, of the faculty, delivered an impressive address, and Dr. Victor C. Vaughan, dean of the department, unveiled a portrait of Prof. Frothingham, following this ceremony by delivering an eulogistic address.

Dr. William H. Southard, the oldest practicing physician in Kalamazoo, Mich., died there on February 23 last, at the age of eighty-one. He was a prominent citizen of Kalamazoo, and when the Republican party was formed at Jackson, Dr. Southard, then living in Albion, was one of the principal workers in the movement that gave the party birth.

The United States will have an exhibit of radium at the World's Fair in St. Louis, Dr. George F. Kunz, of New York, special agent of the United States geological survey, having been appointed commissioner to look after this matter. Dr. Kunz has been authorized to secure and prepare material for the exhibit, which will include radio-active substances of all kinds obtainable, and also demonstrations of the action of radium compounds, ultra-violet light and Roentgen rays on mineral and chemical substances. The exhibit will be made by the geological survey in the United States building at the fair; there will be another exhibit of radium and radio-active substances in the mines building.

Adherents of the system of feeding patients entirely on cereals can find but scant comfort in the reports from the experiments now in progress at New Haven, where a squad of army men is undergoing investigations along this line. A fifth member of the band has just left the station, collapsing as the result of insufficient nourishment. He lost thirty-six pounds, and has been sent to Fort Trumbull, where he will return to regular army rations, in order to be built up. Of the seventeen soldiers who began the experiments, only eleven are left, and after April the investigations will be discontinued, owing to the difficulty of securing subjects who will stay long enough to give any definite results.

Cleveland, Ohio, is reported to be facing a typhoid fever epidemic which threatens to assume large proportions. Sixty-eight new cases were reported on March 1, and the disease is said to be spreading rapidly. In the month of February there were 465 cases, with forty-five deaths. There is much dissatisfaction expressed at the quality of the water which the city is using. It comes from Lake Erie, and Cleveland has spent $5,000,000 to get pure water, the intake pipes being five miles out in the lake. There is a movement on foot now to build a filtration plant, at a cost of $2,000,000.

A European physician with a taste for statistics has been making some rather interesting researches as to the hour at which people are most likely to die of illness. His investigations, based on the observation of 2,880 cases, in which the patients were of all ages, showed him that deaths are most numerous between the hours of 5 and 6 a. m. and least numerous between 9 and 11 in the morning. The death rate is not high between 10 a. m. and 3 p. m., the "fatal hours" being from 3 to 6 a. m.

Reports to the Secretary of State for Michigan indicate that there were 32,807 deaths in the state in 1903, this being 1,845 more than were reported in 1902. The death-rate was 13.2, or a trifle higher than that of the preceding year. Pneumonia was responsible for the greatest number of deaths, 2,843; consumption was a very close second, with 2,462. Accidents and violence caused 2,170 deaths; cancer, 1,659; typhoid fever, 574; diphtheria, 562; croup, 125; scarlet fever, 198; measles, 170; whooping cough, 370; influenza, 517; and small-pox, 29.

The March number of the Colorado Medical Journal will be devoted to a symposium on pulmonary tuberculosis. The special number will be about double the usual size, and will contain nineteen original articles by well known physicians, bearing on the subject. Dr. E. L. Shurly, of Detroit, will contribute a paper on "Susceptibility to Tuberculosis under Different Conditions."

NEW INSTRUMENTS AND DEVICES.

Mention of new instruments and devices in this department is entirely complimentary and articles illustrated are judged on their merits.

We invite manufacturers and physicians to send us matter suitable for publication under this head. A description of the device and an electrotype or half-tone with a base not greater than two and five-eighths inches should be sent.

Always mention the price of the article in question.

The management cannot undertake to return cuts unless postage for same accompanies the letter with which they are sent.

A Handy Informer.

This device will meet the approval of the practicing physician who has an number of patients and no office girl to look after them—a combination, we imagine, that arises not infrequently. The cut shows clearly just what the thing is, and it is certainly neater and more convenient than a slate and pencil, or a collection of cards stuck in the door.

The indicator is 4¾ inches across the face, and the printing is in such bold-faced type that it is easily read at any reasonable distance. A turn of the knob in front of the dial advises your waiting patients that you are engaged, with a request to them to be seated, or that you are absent, to return at an hour indicated on the smaller dial below, or that you are out and do not intend to return that day.

It is made of spun brass, handsomely nickel-plated, and as strong as it needs to be. It retails for $1.25 and is well worth the price.

Richter's Needle Holder.

This needle-holder is claimed by its manufacturers to be the best device for this purpose ever placed on the market.

A glance at the illustration will show that it is constructed on a principle that is entirely new. The rounded portion of the shorter jaw engages the needle shank between itself and the projection on the longer jaw, while a slot in the latter permits the grip to become as tight as the operator desires, without breaking the needle. The handles lock, as shown, and

the different notches in the lock regulate the grip of the holder on the needle.

The holders are all hand-forged and are of superior quality and finish. They come in three lengths—5½, 7 and 8 inches, and are sold to the profession for $3.50 apiece.

Surgical Leg and Foot-Rest.

There are doubtless many physicians in this country to whom the device we illustrate will be of great interest. It is not difficult to enumerate several ways in which it will prove of great service to the general practitioner who is more or less often called upon to make examinations and to perform operations in the homes of his patients, particularly his female patients. It is built on a thoroughly practical plan, and is both strongly made and handsomely finished. All the parts are constituted of malleable iron and steel and finished in nickel-plate.

As shown in the illustrations, the device consists of two movable stocks, set into a device for clamping the base to the edge of a table, the side of a bed or to any other piece of furniture that will afford a grip for the clamp. The stock is hollow and has a set-screw near the end, for the purpose of holding either the shank of the ordinary strirrup foot-holder or the leg-rest. The joint into which the stock sets near the clamp admits of a variety of positions, which are clearly

shown in the illustrations. When the leg-rest is used, a few turns with an ordinary roller-bandage holds the patient's leg firmly in position.

The figures show—1. The position of the foot-rest in ordinary examinations, and for work that does not require an anæsthetic; 2. Position of leg-rest for use with an anæsthetic in operations upon vagina, rectum and uterus; 3. Leg-rest in position for flexing the thighs back upon the abdomen, when it is desirable to have the hips brought well forward to the edge of the table; and 4. All the parts of the complete device.

The outfit weighs ten pounds, and may easily be taken apart and placed in a satchel. It is virtually an operating table for use in the patient's own home. Its retail price is $10.00.

From France, where automobiling is carried to the verge of insanity, the physicians are reporting an increasing number of cases of acute nervousness due directly to the "sport." Patients suffer from a sort of neurosis of anxiety, brought on by the excitement and mental tension of rapid traveling, with the attendant dangers to foot-passengers and chauffeur alike.

Notices have been sent out to the effect that examinations for the position of surgeon in the navy of the United States will be held shortly. The Russo-Japanese war is expected to give opportunity for special study, and the navy needs more men to take the places of those who will ultimately be detailed for service in the far east for purposes of observation.

It cost the city of Philadelphia only $39,000 for the services of sixty-six physicians engaged in public vaccination for a period of four months. The virus was furnished by the city, and the doctors were allowed 40 cents of each vaccination they performed.

Philadelphia's death-rate for the last week in February was uncomfortably high, 693 deaths being reported for the seven days. Of these, twenty-three were from typhoid, which is reported to be on the increase. The week's total of cases was 148.

In the week ending February 27 last, a total of 1,797 deaths was reported from New York City. This is a high record since the influenza epidemic of 1892-1893. Influenza is said to be responsible for a large number of the deaths noted.

Prof. A. W. Palmer, head of the department of chemistry in the University of Illinois, died at Champaign, Ill., on February 4 last. He was a well known chemist and a considerable contributor to scientific literature along the lines of his specialty.

A leaflet dealing with the best means of restricting pneumonia has been issued by the Michigan State Board of Health. The malady is shown by the pamphlet to cause more deaths than any other disease except tuberculosis.

PROGRESS OF MEDICAL SCIENCE

Serum Therapy.

Newcomb (*Courier of Medicine*, January, '04), in discussing the progress made in this therapeutic field during the past year, says:

"Cairns reports the use of antidiphtheritic serum in advanced and malignant cases of dipththeria by the intravenous route, and advocates the use of larger doses for subcutaneous and intravenous injection. For the former method his doses varied from 4,000 to 20,000 units, and for the latter from 20,000 to 35,000 units.

"Morse gives negative results to his treatment of pneumonia in infancy by the antipneumococcic serum. Other observers have used the antidiphtheritic serum in pneumonia with apparent benefit.

"Hirchlaff of Berlin has prepared a serum for the treatment of acute and chronic morphine poisoning which promises to become of use. It is made from the blood of rabbits which have been subjected to the influence of morphine for from three to five months; and Grofreddi has prepared a similar substance from the blood of dogs.

"In regard to tetanus antitoxin Packard and Wilson estimate that since its introduction the mortality has been decreased from a general average of 80 per cent. of all acute cases to from 40 to 50 per cent., and in chronic tetanus from 40 to 20 per cent. However, one fact stands predominant, and that is, that good results are not to be expected from antitetanic serum, unless given in the earliest stages of the infection, and that the best results are obtained only when it is administered immediately after the possible exposure.

"Josias announces good results in the treatment of typhoid efver in children by Chantmesse's serum in all cases where its use was begun early, and neither local inflammation nor constitutional disturbance was observed to follow its administration.

"The serum therapy of dysentery has hardly come up to expectations, and is yet not so far removed from the stage of experimentation that definite judgment can be passed upon its utility.

"Favorable reports have been made by several observers upon the use of Dunbar's hay-fever antitoxin.

"Yersin's serum for bubonic plague is of the greatest value, being both antitoxic and bactericidal, and should be used early in the disease both subcutaneously in the neighborhood of the bubo and also intravenously in large doses. Haffkine's serum has likewise proven of great value as an immunizing agent during epidemics."

F. B. T.

Drainage in Empyema.

Brinkman (*Am. Medicine*, February 13, 1904), says that purulent pleurisy follows simple pleurisy in about 25 per cent. of all cases; that it also occurs as a sequel to various infectious diseases, as scarlet fever, measles, whooping-cough, pneumonia, typhoid and tuberculosis, or may result from infections following traumatism of the chest wall. The prognosis depends upon the primary disease and the type of infection, the tubercular type being very unpromising. The diagnosis being confirmed by exploratory puncture, treatment may be by (1) Simple excision of

the ribs and tubular drainage; (2) The radical Estlander operation; or (3) Resection with stitching of pleura to skin without other drainage.

The latter is preferred because no foreign body is left in the chest to irritate and keep up the discharge; ocular or digital inspection of the lung is possible; adhesions may be broken up, and the mortality is lower than with the more extensive Estlander operation.

The operation is performed as follows:

After proper preparation, a vertical incision is made in the mid-axillary line, exposing the fifth, sixth and seventh ribs, the tissues reflected back so as to expose at least two inches of the ribs and the periosteum freed from the anterior surface to permit easy introduction of the periosteal elevator beneath the ribs, by which they are separated from the periosteum and underlying structures. The ribs are then resected without wounding the pleura and the pus gradually evacuated through a small incision at the lower angle, after which the pleura is incised to the full extent of the wound. After the cavity has been inspected, adhesions separated and pockets emptied, the operation is completed by stitching the pleura and skin together around the entire wound, the pereosteum being carefully dissected away to avoid interference in healing.

Of 27 cases treated by this method, all recovered and only two were protracted unduly, one by gangrene, the other by tuberculosis of the lung.

F. B. T.

Aseptic Vaccination.

Sajous (*Monthly Cyclopedia of Practical Medicine*, January, '04), shows by recent statistics from Germany and Porto Rico the efficacy of general enforced vaccination, and deplores the laxity in this regard prevalent in the United States, where during the last six months of 1903, 13,739 cases of small-pox are reported as against 14 for the same period in Germany.

Notwithstanding the convincing evidence of a century of facts, there exists a popular prejudice against vaccination, due to dread of inoculation, with the virus, of systemic poisons through the "sore arm" of former days.

The glycerinated calf-lymph, now in common use, should eliminate all grounds for apprehension, because glycerine is a potent germicide, capable of destroying all contaminating pathogenic bacteria without interfering with the action of the vaccine.

Moreover, the dilution of the lymph with glycerine and sterile water reduces the quantity of lymph used in a single vaccination to one-fiftieth of the amount required of dry lymph.

A third factor, worthy of consideration is the protective influence of vaccination against diseases other than small-pox, which some observers believe to exist. At any rate, no germ is introduced into the body by a properly prepared and kept glycerinated vaccine, used under aseptic conditions. We are merely using a minute dose of an agent capable of calling into inordinate activity all the protective functions of the organism. Rosenau, of the Marine Hospital service, has shown that the dry points contain large numbers of bacteria and that the glycerinated tubes may also, if the virus is not glycerinated a sufficient time before being sold.

Howard and Weir, of the City Bactereological Laboratory of Cleveland, continuing these investigations, found most of the glycerinated lymph remarkably free from bacteria.

Sajous concludes that frequent bacteriological tests by Boards of Health will assist manufacturers in eliminating untoward effects of vaccination and public reassurance of the elimination of all com-

plications will secure hearty co-operation in completing Jenner's work.

F. B. T.

The X-ray in Treatment of Tuberculosis.

Boggs (*Journal of Advanced Therapeutics*, January, '04), reports treating 28 cases of tuberculosis with the following results: Two of tubercular ulcers of the larynx—one healed, the other improving; five of tubercular joints—3 cured, 1 improved, 1 unimproved; 13 pulmonary cases—two cured, 7 improved, 4 unimproved; and of 5 cases of tubercular glands, 3 are apparently cured while 2 are improving. The X-ray treatment should be supplemented by forced feeding, good nursing and careful attention to digestion, assimilation, metabolism and excretion.

F. B. T.

Late results of X-Ray Treatment of Sarcoma.

W. B. Coley (*Med. News*, February 6, '04), cites a number of his own cases, showing the brief improvement of cancers from X-ray treatment which are too often reported as cures and is inclined to be pessimistic regarding the permanency of X-ray effects.

He concludes that we are already beginning to see the effects of too optimistic reports which have been very harmful in delaying operative measures until too late.

He sums up his conclusions as follows:

"A careful review of all the reported cases of cancer treated by the X-ray, together with a personal experience and observation of more than 100 cases of various forms of malignant tumors, have served to confirm and emphasize the convictions already expressed.

"The use of X-ray in cancer should be limited to recurrent and inoperable cases, with the sole exception of small superficial epithelioma of the face. Even here, I believe, the results of excision will prove to be better and more lasting, save in the proximity of the eyelids and nostrils.

"It is most misleading to report as cures, cases in which malignant tumors have merely disappeared under the influence of the X-ray, since speedy return is the rule rather than the exception.

"At the present moment there is no evidence to prove that any permanent cures have been obtained, save possibly in the case of rodent ulcer."

F. B. T.

Rare Ocular Lesions in Scarlet Fever.

Ellet O. Sisson, M. D., Keokuk, Iowa, (*The American Journal of Ophthalmology*, December, 1903), draws attention to the fact that the specialist sees but few of the eye lesions accompanying scarlet fever and that it is not until the disease of this organ has assumed a very virulent type that the general practitioner calls him into the case. He goes on to say that among the rarer forms of eye disease complicating this fever are found uræmic amaurosis, purulent inflammation of the vitrous, phlegmon of the orbit and thrombosis of the cavernous sinus.

Uræmic Amaurosis is the most common of these. The blindness comes on suddenly during the period of desquamation. Becomes rapidly complete and is usually accompanied by other symptoms pointing to auto-intoxication of the general nervous system, such as headache, vomiting, dyspnœa, loss of consciousness and convulsions.

The pupil does not lose its activity to light, which shows a lesion high up in the cerebral centers. The prognosis is good.

Purulent Inflammation of the vitreus is a metastatic affection occasionally following in the wake of scarlet fever.

The symptoms are those of purulent infiltration of the uveal tract and vitreus.

If the pus be circumscribed in the retina, the condition might be mistaken for glioma, especially in young children.

Phlegmon of the Orbit is also a metastatic disease involving the cellulo-fatty tissue in the orbital cavity.

Pus is formed in the retro-bulbar space in large quantities and is finally evacuated through a perforation in the lid.

Resolution takes place rapidly, and if the optic nerve has not been involved in the septic process, sight is not permanently interfered with. A fatal issue may take place by extension of the suppurative process to the intra-cranial cavity, eventuating in purulent meningitis or brain abscess.

Thrombosis of the cavernous sinus is a very grave complication. Out of 182 reported cases of this lesion only 14 recovered.

One case of this description has been subjected to operative interference (Wells and Germain) which, however, did not recover, although the surgical accessibility of the lesion was clearly demonstrated.

Retinitis Albuminurica has also been observed and in it the prognosis is better than in the chronic form of Bright's, not associated with an exanthematous fever.

The following other lesions have been observed as complications of Scarlet Fever: Thrombosis of the central retinal artery (Hodges); *Papillo-Retinitis* without albuminuria (Pfluger); *Blindness* without ophthalmoscopic changes (Leber); and *Accommodation Asthenopia-Corneal Ulceration.*

The following conclusions were reached by the author:

First—In view of the fact that scarlet fever is one of the most common of the exanthemata and that the majority of eye lesions occurring in connection with it are of a serious nature, involving not only loss of vision, but in some cases life itself, greater attention should be given to them than they generally receive.

Second—That if the operation on the cavernous sinus can be made without grave danger to the patient and with the chance of lessening the mortality, as claimed by the operators, such an operation is justifiable and should be performed.

D. M. C.

Is Double Operation for Senile Cataracts Justifiable?

Howard H. Hansell, M. D., Philadelphia, (*The Ophthalmic Record*, December, 1903), raises the question of the desirability of removing cataracts from both eyes at one time rather than doing it at two sittings separated by a considerable period of time.

The chief contraindications are that infection may take place, and thus both eyes be lost, the presence of lachrymal disease or grave constitutional conditions.

He further states that the double operation is justifiable under the following conditions:

(1) Vision in both eyes greatly reduced.

(2) Both cataracts ripe.

(3) That there is nothing in the patient's physical or mental make-up that might militate against recovery.

(4) That the extraction of the first lens was accomplished without accident.

The writer further says that there is a great gain to the patient in being subjected to only one operation; less time is occupied in recovery, he has binocular vision and refractive correction is simplified.

The author has performed the double operation for five patients and the results have all been good. He feels that his experience thus far makes him feel like increasing the number as occasion may arise.

D. M. C.

Physical Overexertion and Health.

It is probably safe to affirm that pain or great discomfort is always a signal that more or less damage is being done, and that the cause of such discomfort should, if possible, be removed, not so much on account of the unpleasant sensations, but on account of the real injury to some portion of the economy. Jno. Knott, M. A., M. D., of Dublin, Ireland, (*American Medicine*, January 23, '04), has written an able article on "Physical Overexertion and its effects on Health," in which he points out the fact that muscular tissue on account of its mass and activity furnishes four-fifths of the body heat, which fact alone makes it of paramount importance to maintain it in a state of healthy functional activity. Practically all the waste product from muscular activity is excreted by the kidneys as urea. Increased activity means increased waste, which, up to a certain point, can be taken care of, but beyond which it begins to accumulate in the tissues and circulation, producing among other symptoms, that of fatigue; when this stage has been reached, all the tissues, receiving the pabulum from the blood, suffer, and a condition of healthy nutrition is not maintained. The effect produced on nerve-cells and fibers is most noticeable, causing them to transmit diminished or impaired impulses to the tissues, still further lessening their power to normally functionate, "throwing thus the whole system into a general state of anarchy, precisely what happens when muscular fatigue is carried to excess."

The heat center which has the threefold function of thermogenesis, thermolysis and thermotoxis, fed with such impure blood, ceases to regulate body temperature, and fever results. Knott says: "Let us now direct our attention to the phenomena of excessive muscular exertion, such as we see in the exercise of running. In the earlier stage, both respiration and circulation are accelerated, and before the amount of exertion passes the salutary dose, the individual simply enjoys a phase of greater intensity of life without feeling any trace of discomfort or incurring the slightest danger. In the advanced stage, respiratory distress sets in, the individual experiences a sensation of constricting tightness about the chest, and a feeling of discomfort in the head, which goes on to the appearance of clouds and flashes before the eyes, ringing sounds in the ears, a general bluntness of sensation and confusion of impressions and ideas. In a still further stage, a sensation of overpowering anguish overspreads the whole system, the head feels as though bound in an iron band, distressing giddiness sets in, the brain is overcome by a kind of drunkenness, and finally the individual loses consciousness and falls in a fainting state; the heart's action is feeble and syncope may prove fatal."

Well regulated exercise is necessary and beneficial to good robust health, but its abuse leads to dire and lasting results, impairing both body and mind.

A. W. I.

Epilepsy.

Two articles in the *Journal of the American Medical Association* of January 23, '04, one by Biller, of Cherokee, Iowa, the other by McCaskey, of Fort Wayne, Indiana, treat interestingly and instinctively of epilepsy, each laying especial stress on gastric and intestinal distubances as causative or exciting factors, a belief which is being more and more recognized by neurologists and the profession in general.

Both writers agree that even though modern methods of investigation and research fail to discover any organic lesion of the nervous system, that some lesion must of necesity exist. McCaskey says: "There must be an organic defect in the

finer, and as yet inscrutible ultimate structure of the cortico-spinal neurons. The assumption of such a fundamental deviation from the average normal type of construction of the nervous system * * * which is possibly always inherited or at least acquired during the early developmental period, appears to me absolutely necessary to explain, why apparently identical causes will produce the clinical manifestations in one case and fail to do so in a hundred others."

As in the convulsions of infants, we look for and infrequently find the cause in the intestinal tract, so it is here that it is frequently found in the epileptic, for says Biller, "I believe that many cases of epilepsy are nothing more than the simple convulsions of infancy and childhood where the cause has been overlooked till the epileptic habit has been formed."

Biller then recites several cases that came to him in his early practice, in which large doses of bromide were used with no good result and he says, "I hope with no injury," that were cured by correcting morbid conditions of the digestive tract.

A. W. I.

With a creditable taking of Time by the forelock, the health board of Norfolk, Vt., has informed every owner of real estate in its territory that he must either fill in or drain all low, boggy or marshy land owned by him. Inspectors have made a careful tour of the city and have reported all land of this character; next month another canvass will be made, and property owners who have not taken advantage of the early warning will be dealt with according to law. By this systematic means, the board hopes to materially reduce the numbers of the festive Vermont mosquito. It is not at all a bad idea.

In the case of Leake vs. Lucas (Neb.) 62, L. R. A. 190, it was held that necessary medical attendance furnished a husband temporarily incapacitated by illness, who is actually a part of the family, living with it as such, comes within the rule of the statute making the wife liable as surety for necessaries furnished the family.

Indiana's state board of health, an organization that has done much to commend it in the eyes of the profession, has laid new plans for instructing the people in the state in regard to the wide-spread danger from tuberculosis. It has asked the health officers to secure all the data possible in regard to the suffering caused by the disease, with a view to bringing convincing statistics before the people, as a means of enlisting their support for a movement to curtail tuberculosis in Indiana.

Judge J. H. Richards, of Webster City, Ia., has handed down a decision in which he holds that those who heal or profess to heal without the use of drugs do not violate the state medical law. This decision has affected several thousand people in Iowa, and the case of Iowa vs. Dr. J. Wibon, on which the decision was based, will be taken before the supreme court.

A press dispatch from Odessa states that another detachment of Jewish physicians left for the front on March 4. They were cheered as they left. Possibly they they preferred living in the state of war to being hunted in a state of peace, and the cheers were indicative of the crowd's gladness to see them headed for a place of danger.

A recent innovation in the New York fire department is some leather surgical cases, containing material for first aid work. Twenty-five have already been issued and ultimately every fire company in the city will have one.

BOOK REVIEWS

Diseases of the Eye. By L. Webster Fox, A. M., M. D., Professor of Ophthalmology in the Medico-Chirurgical College of Philadelphia, Pa.; Ophthalmic Surgeon in the Medico-Chirurgical Hospital. With Five Colored Plates and Two Hundred and Ninety-Six Illustrations in the Text. Pages, 557. Price, Cloth, $4.00 Net. New York & London; D. Appleton & Company, Publishers, 1904.

Dr. Fox's preface to this work of his is a short fore-word to his readers that they may glance at with profit. His text is the result of a series of lectures delivered in the Medico-Chirurgical College for a period of ten years. "Its object," he says, "is not to supply a mere ephemeral sketch of existing information on ophthalmology, but to provide a digested summary of the known facts for use of students who in after-life become practitioners of medicine. * * * Much has necessarily been left unsaid. For students who wish to follow the practice of ophthalmology exclusively, the author has simply laid a foundation upon which, by practice and careful observation, they may build for themselves a broad reputation and confer upon the afflicted the greatest of all benefits, the restoration of vision."

With this plan clearly in mind, Dr. Fox proceeds to a discussion of the eye in general and in particular, in health and in disease, and he places before his readers a surprisingly large number of thoroughly authentic facts in such form that the close reader may well gain an excellent general knowledge of the subject from this book alone. Each chapter is a monograph on some phase of the subject, and important matters are properly insisted on. The language is that of the teacher who realizes that time is precious, but that important things must be given time. The text is clear and readable, free from mannerism, and full of close observations, the result of long experience.

Diseases are considered according to the structures attacked in the order in which they are encountered in going from without inward. There are especially valuable articles on albuminuric retinitis, hæmorrhagic retinitis, lid operations, declinations of the retinal meridians, cataract, glaucoma, and diseases of the orbit.

The book is handsomely illustrated, and well published in every particular.

Fischer. Infant-Feeding in its Relation to Health and Disease. A Modern Book on All Methods of Feeding. For Students, Practitioners and Nurses. By Louis Fisher, M. D., Visiting Physician to the Willard Parker and Riverside Hospitals, of New York City; Attending Physician to the Children's Service of the New York German Poliklinik; Etc., Etc. Third Edition, Thoroughly Revised and Largely Re-Written. Containing 54 Illustrations, with 23 Charts and Tables, Chiefly Original. Pages, 357. Price, Extra Cloth, $2.00 Net. F. A. Davis Co., Publishers, 1914-1916 Cherry St., Philadelphia, Pa.

The popularity which this work has enjoyed is well evidenced in the fact that a call for a second edition was made within six months of the issuance of the first. Now a third has become necessary. In its present form the work has been completely revised and, in fact, almost entirely re-written; new chapters on "Milk Idiosyncrasies in Children," "Buttermilk Feeding," "Scurvy" and "Feeding Children Afflicted with Cleft Palate," have been added, together with some illustrations showing poor breast-milk.

A work of this kind, when it is authoritatively written, naturally interests a great many readers. Pediatrists must

find some of their chiefest energies directed to researches in the line of the best methods of infant-feeding, the general practitioner finds a knowledge of these matters indispensable, and nurses are also much concerned in these questions. Dr. Fischer's work may be said to be fairly representative of the sum of modern knowledge on the important subject of infant-feeding, and the text, in addition to being thoroughly reliable, is written in a free and pleasing way that drives home some of the things that author evidently wants to impress on his readers. The arrangement of the subject-matter is logical and complete, and the many little points that will readily occur to those who are familiar with children have been brought in in the right place. A dietary for older children finds a place in the book, and there are a number of statistical tables that are interesting and valuable. The chapter on laboratory modification of milk is an exceptionally useful one.

Lectures on the Nervous System. Second Series. Subjective Sensations of Sight and Sound, Abiotrophy, and Other Lectures. By Sir William R. Gowers, M. D., F. R. C. P., F. R. S., Hon. Fellow R. Coll. Phys., Ireland; Member of the Soc. Medicines Russes of St. Petersburg, of the Royal Soc. of Science of Upsala, Etc. Pages, 250. Price, Cloth, $2.00. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut St., 1904.

Neurologists and others who are interested in psychology will find much to interest them in this book by Sir William Gowers, whose work along the lines represented in the title of the volume under consideration has given him a more than national reputation. The subject matter of the book is made up from a collection of lectures delivered before a number of important foreign societies, all of which have been carefully revised by the author for publication in the present form.

The consideration of subjective visual sensations takes up the important topic of color-vision, with some considerations of the visual sensations in migraine, and the lecture on subjective sensations of sound furnishes us with some interesting differentiations on the subjects of tinnitus. Metallic poisoning, syphilitic diseases of the nervous system, syringeal hæmorrhage into the spinal cord, and the use of drugs in the relief of nervous conditions are taken up with a conciseness and a definiteness that are very often lacking in contributions to the general subject of neurology. The specialist will find much to agree with in Sir William's writings, and the general practitioner will learn many things that are sure to be to his advantage when he undertakes to treat a case under the general head mentioned.

There are a number of good illustrations, and the book is published in a manner to reflect credit on those responsible for it.

A Laboratory Manual of Physiological and Pathological Chemistry for Students in Medicine. By Dr. E. Salkowski, Professor in the University and Director of the Chemical Laboratory of the Pathological Institute, Berlin. Authorized Translation from the Second Revised and Enlarged German Edition. By W. R. Orndorff, A. B., Ph., D., Professor of Organic and Physiological Chemistry in Cornell University. With Ten Figures and a Colored Plate of Absorption Spectra. Pages, 263. Price, Postpaid, Cloth, $2.50. New York, John Wiley & Sons, 43-45 East 19th St.

No worker interested in the subject suggested by the title of this work can fail to be pleased with its contents, for in clear and simple language it outlines the

best technique for making the most important investigations required of the worker in the two branches of chemistry which are, perhaps, the most closely allied to the study of medicine. Dr. Salkowski's opportunities for carrying out the investigations in which he is so greatly interested have been most varied, and he has been more than usually successful in securing a translator who is at once fair and interesting. America has done much to promote the science of physiological and pathological chemistry, and Dr. Salkowski states in his preface that he hopes his book will have the effect of stimulating interest in the study abroad. It would appear that there is every reason to believe that his hope will be justified.

Sixteen chapters concern themselves with the general subject of examinations of the blood, urine, bile, muscular tissue and so on, and the matter of quantitative analysis is taken up at some length further on in the text. Three appendices include a list of reagents, tables of specific gravities, which are unusually complete, and international atomic weights. The illustrations are useful in furthering the design of the text. There can be little doubt that the book in its present form will prove an invaluable aid to the worker in the laboratory, and Dr. Orndorff deserves the thanks of those especially interested in his subject for the clear manner in which he has presented it to them.

At a dinner given in New York the early part of this month to commemorate the twenty-fifth anniversary of the inauguration of post-graduate medical study, and to honor Dr. St. John Roosa, president of the post-graduate hospital in New York, Dr. William Osler, of Johns Hopkins university, touched on a theme that must be near the heart of every thinking medical man in the country. After enumerating a few of the many things that are really needed in America for the improvement of medical education in general and of post-graduate study in particular, he stated his belief that a most important need was consolidation and unification in medical teaching. He felt that money was being wasted in the almost excessive duplication of expensive "teaching plants," and made the following prophecy in regard to the ultimate outcome of the situation: "I believe that within fifty years there will be but one great institution for the technical instruction in medicine with all the practical teaching given in hospitals." The idea of a sole institution of technical medical teaching may be a trifle in advance of the times, but it is something that may come within half a century; the spirit of the age is toward consolidation and concentration, and, with increased transportation facilities, it is not too visionary an idea to think of an institution such as is spoken of by Dr. Osler. We all feel the need of improved facilities for teaching, and note with pleasure the steady steps that are ever being taken in the securing of proper medical educational institutions. With the poor schools crowded out, and the standard made as high as it ought to be, the profession and the patient would both benefit. The incompetent would be the only sufferers, and they will probably be the only ones to wish that Dr. Osler's prophecy may not be realized.

The American International Congress on Tuberculosis will hold its session at the World's Fair in St. Louis, Mo., October 3, 4 and 5 next.

Dr. F. G. Novy, of Ann Arbor, is the newly elected president of the Society of American Bacteriologists.

INDEX.

ORIGINAL ARTICLES—APRIL, 1903, to MARCH, 1904.

Title.	Author.	Date.	Page.
Alcohol and its Effects on the System	Edward T. Milligan, M. D.	June, '03.	81-84
Business Methods	Drs. David Inglis, F. W. Robbins, George Duffield, B. R. Shurly, Johann Flintermann, J. E. Emerson, R. W. Gillman, H. E. Safford, C. W. Hitchcock, W. F. Metcalf, W. P. Manton, F. B. Tibbals	Nov. '03.	257-262
Blood Pressure in Surgery, On the, (Illustrated.)	Geo. W. Crile, M. D.	May, '03.	37-52
Bladder Segment of the Ureter, The	Byron Robinson, M. D.	Dec. '03.	278-282
Cutaneous Blastomycosis, (Illustrated)	H. R. Varney, M. D.	June, '03.	73-75
Conclusions from 51 Intubated Fatal Cases of Laryngeal Diphtheria	B. R. Shurly, M. D.	Oct. '03.	216-219
Comments and Additions	Drs. Donald Maclean, Samuel P. Duffield, James Samson Theodore A. McGraw, G. B. Russel	July, '03.	122-127
Chlorosis	Wm. Appelbe, M. D.	Aug. '03.	150-154
Catheter, Retained, A Case of	L. W. Howk, M. D.	Sept. '03.	188-189
Diseases of the Nose and Throat, Some Points in the Diagnosis of, and their Relation to General Medicine	Willis S. Anderson, M. D.	May, '03,	52-55
Dilatation of the Stomach, Acute	W. M. Harvey, M. D.	May, '03.	56-62
Dysmenorrhoea and Allied Manifestations	Ella B. Everitt, M. D.	Mar., '04.	369-374
Eye Clinic at St. Mary's	Eugene Smith, M. D.	Nov. '03.	255-256
Exophthalmic Goitre, The Surgical Treatment of	Max Ballin, M. D.	Nov. '03.	241-248
Gunshot Wound of the Brain, A Case of	Hal C. Wyman, M. D.	Oct. '03.	219-220
General Practice, Sixty-Seven Years of	G. B. Russel, M. D.	July, '03.	109-114
Gastritis, Acute	W. M. Harvey, M. D.	Jan. '04.	318-320
Inguinal Hernia, A Flap from the Fascia Lata in the Operation for the Radical Cure of	Hal C. Wyman, M. D.	Mar., '04.	379-380
Kidney Fixations, Results in a Series of 48. (Illustrated.)	Benjamin R. Schenck, M. D.	Dec. '03.	273-278
Mastoid Operation vs. Wilde's Incision in Child Not Quite Eight Months Old	Emil Amberg, M. D.	Mar., '04.	380
Milk Supply of Cities, The, and Dangers from its Contamination	Guy L. Kiefer, M. D.	Jan. '04.	314-317
Medical Conditions in the Early Forties	Morse Stewart, M. D.	July, '03.	114-118
Neurasthenia	A. W. Ives, M. D.	Sept. '03.	191-192
Only A Drop of Pus	Francis J. W. Maguire, M. D.	Aug. '03.	154-157
Organic Stricture of the Male Urethra	W. A. Hackett, M. D.	June, '03.	78-81
Principles of Medical Ethics	Frank Burr Tibbals, M. D.	Sept. '03.	182-184
Professional History, A Half-Century of	Herman Kiefer, M. D.	July, '03.	118-122
Puerperal Mastitis, Etiology, Prevention and Treatment of	Adeline E. Gurd, M. D.	June, '03.	76-78
Pus from the Upper Urinary Tract	Frederick W. Robbins, M. D.	Apr. '03.	16-19
Rational Treatment of Opium Habit, The, With Report of Unusual Recovery	Samuel Bell, M. D.	Aug. '03.	14-149
Reflex Acts and Instincts, The Essential Nature of	A. W. Ives, M. D.	Nov. '03.	248-254
Spontaneous Rupture of Skin Covering Umbilical Hernia	William Bishop, M. D.	Apr. '03.	20-21
Stammering and Stuttering, Method for the Cure of. (Illustrated.)	George Andrew Lewis	Dec. '03.	282-287
Something About Radium		Aug. '03.	157-159
Septic Mastoiditis, Without Perforation of the Membrana Tympani	Don M. Campbell, M. D.	Sept. '03.	189-190
Surgery of the Ear, Some Observations On	Don M. Campbell, M. D.	Mar., '04.	375-378
Surgical Pathology and Diagnosis. (Illustrated.)	Joseph C. Bloodgood, M. D.	Feb. '04.	337-352
Tuberculosis, The Prevention of	William Tibbles, M. D.	Jan. '04.	305-313
Tuberculosis of the Kidney, Diagnosis and Surgical Treatment of. (Illustrated.)	Ramon Guiteras, M. D.	Apr. '03.	1-16
Tribute to Dr. Vaughan, A		Oct. '03.	221-223

Treatment of Anal and Rectal Diseases, The, Without General Anaesthesia.....Wm. L. Dickinson, M. D.....Aug. '03. 145-147
Total Extirpation of the Prostate in its Capsule, Operation of (Illustrated).....J. B. Kennedy, M. D.....Oct. '03. 209-216
Why we should not Wait for Group Symptoms before a Paracentesis or Mastoid Operation, with Specimens. (Illustrated.) .....Emil Amberg, M. D.....Sept. '03. 177-181

EDITORIALS—APRIL, 1903, to MARCH, 1904.

Title.	Date.	Page.
About Ourselves	Mar., '04	383
American Medical Journals	Oct., '03	225-226
A. M. A. Meeting at New Orleans	April, '03	26-28
Business Methods	Nov., '03	263-264
Blackmail, Medical Defense Against	Dec., '03	288-289
Certificate Mill, The	July, '03	129-130
Century's Progress, A	April, '03	24-26
Campaign Against the Mosquito, The	Sept., '03	197
Dr. Vaughan's Festschrift	July, '03	130
Field of the State Journals, The	Nov., '03	263
Fees, The Question of	Oct., '03	224
Health of Large Cities, The	Dec., '03	289-290
In Memoriam	April, '03	28-29
In Memoriam, Donald Maclean, M. D.	Aug., '03	160-161
In Memoriam, George B. Russel, M. D.	Sept., '03	194-197
Lay Press and the Profession, The	July, '03	130-131
Minnesota and Her Legislature	June, '03	90-91
Michigan State Medical Society Meeting, The	June, '03	85-88
Increasing Cost of Medical Education, The	Aug., '03	161-162
Liberal Proposition, A	Dec., '03	289
Medical Education	Aug., '03	162-165
Medical Press Committee, A	Sept., '03	196-197
Much Ado About Nothing	Feb., '04	353
Nottingham Medical Act, The	Aug., '03	165-166
Our New Home	May, '03	65
Osteopathic Claims to Recognition	April, '03	22-24
Pelvic Disease, Etiology of	Mar., '04	381-382
Public School Hygiene	Oct., '03	226-228
Practical Preventive Medicine	Jan., '04	321-322
Reorganization of the Profession	Jan., '04	322
Sajous Discovery, The	May, '03	63-65
Should Physicians Advertise?	June, '03	88-90
Surgical Pathology	Feb., '04	353
Three Old Stalwarts	July, '03	128
Typhoid Perforation, Surgical Treatment Of	Mar., '04	382-383
Wayne County Medical Society, The	July, '03	128-129

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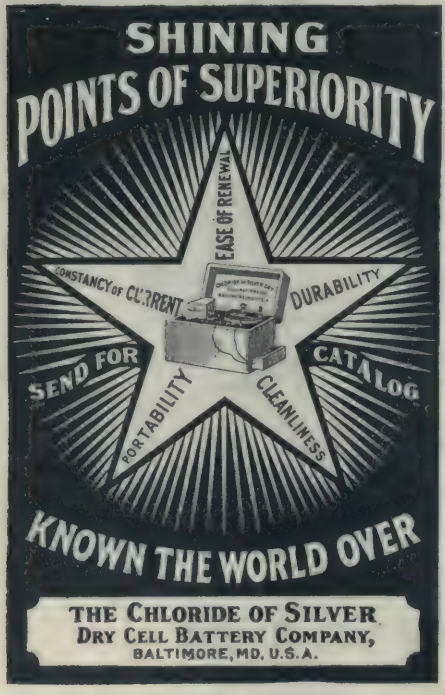

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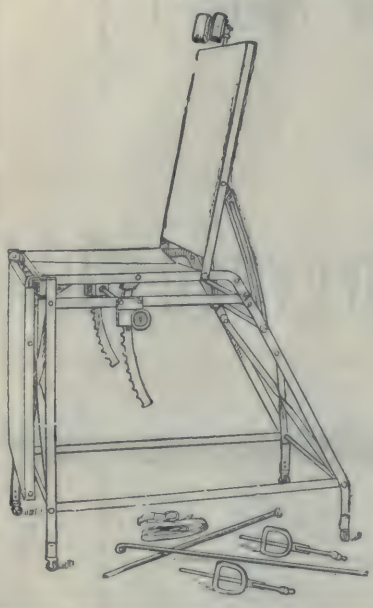

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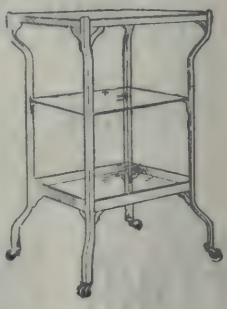

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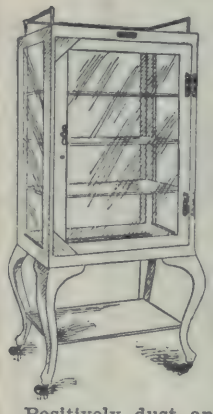

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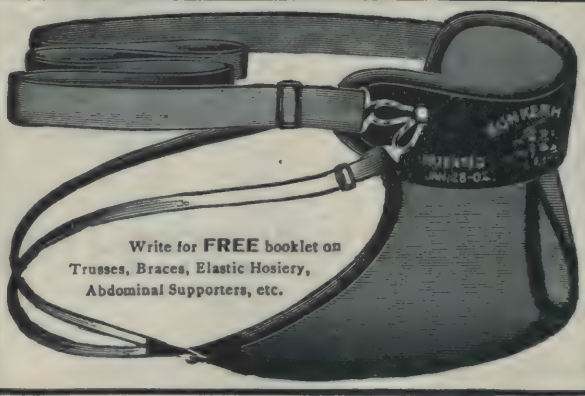

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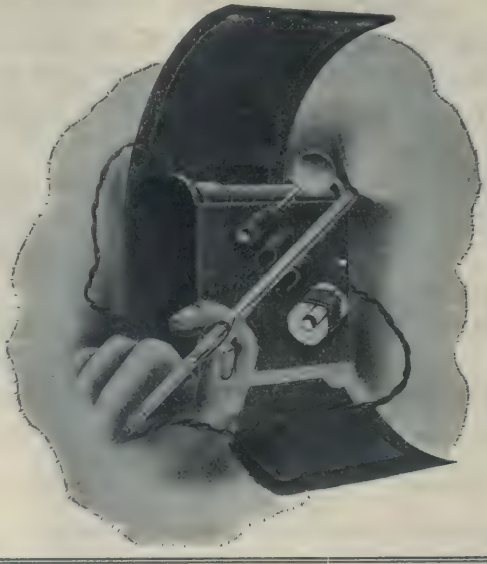

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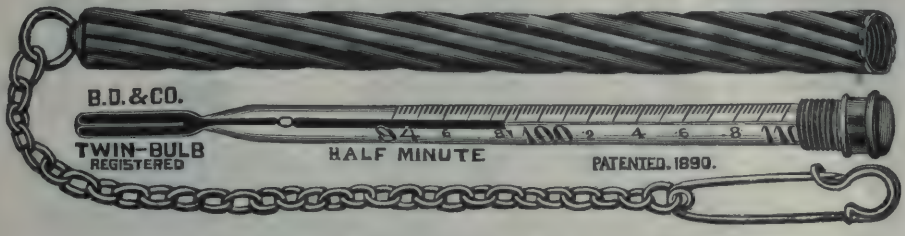

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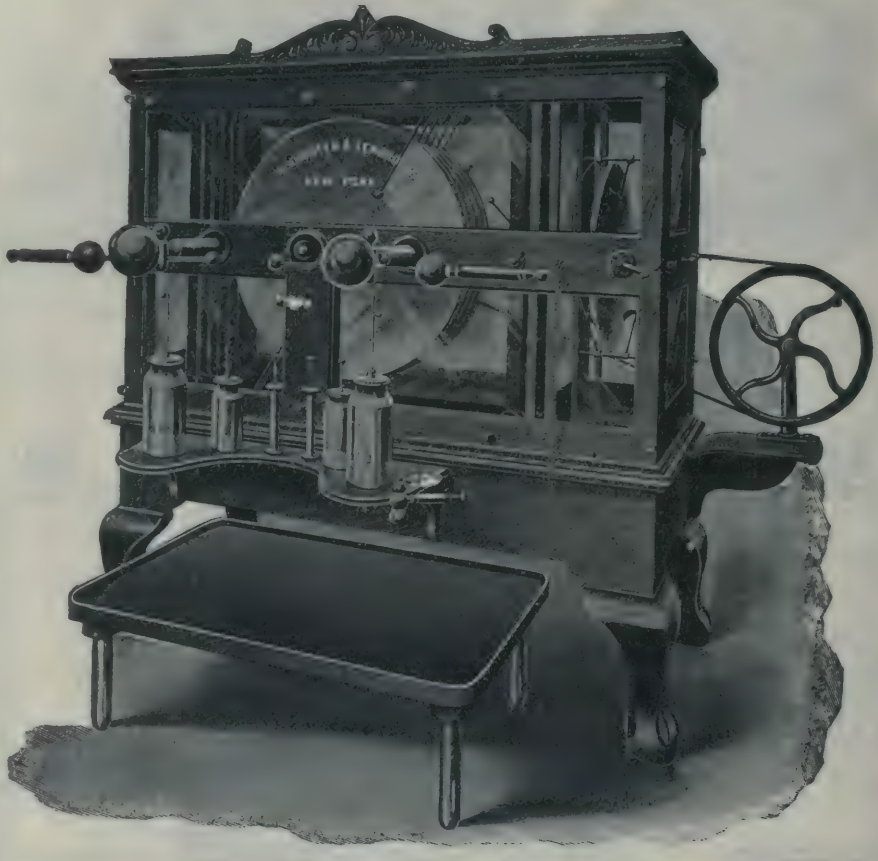

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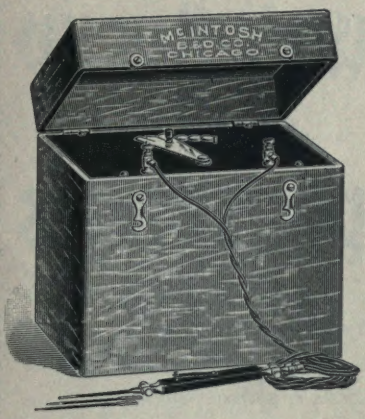

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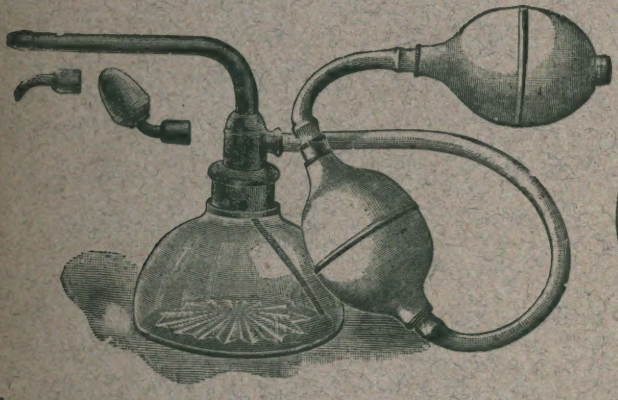

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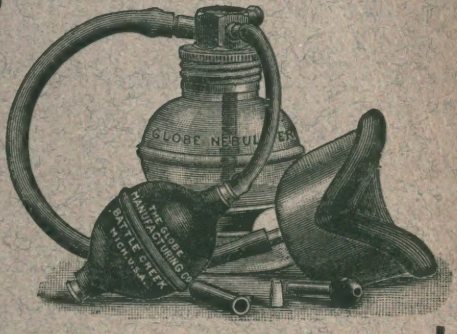

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